Journal
OF THE NATIONAL ASSOCIATION
OF CHIROPODISTS

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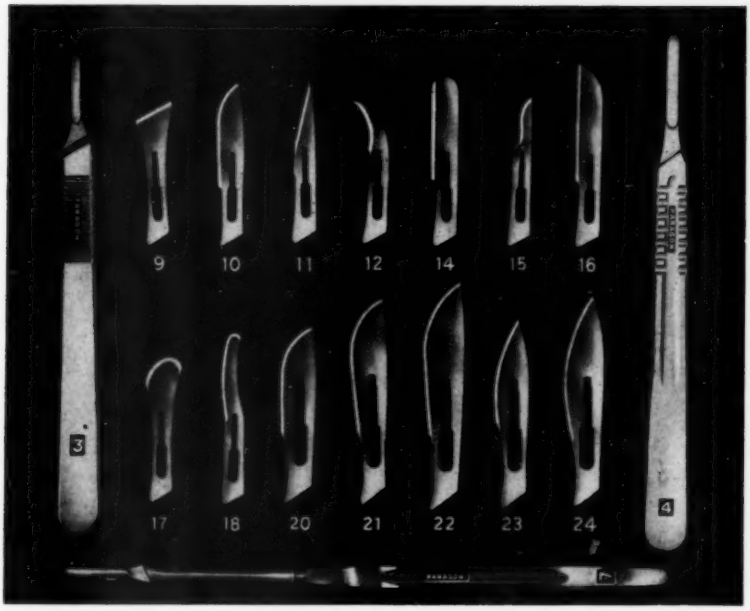

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The *Journal of the National Association of Chiropodists* is published monthly and copyrighted in 1956, by the National Association of Chiropodists.

Entered as second class matter at the P. O. at Boston, Mass., March 27, 1934, under the act of March 3, 1879. Publication office, 375 Broadway, Boston, and Editorial-Executive offices 3301 16th St., N.W., Washington 10, D. C.

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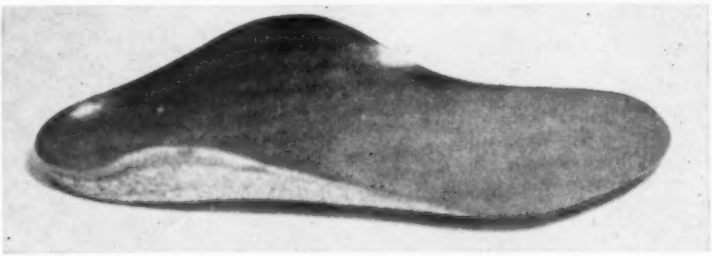

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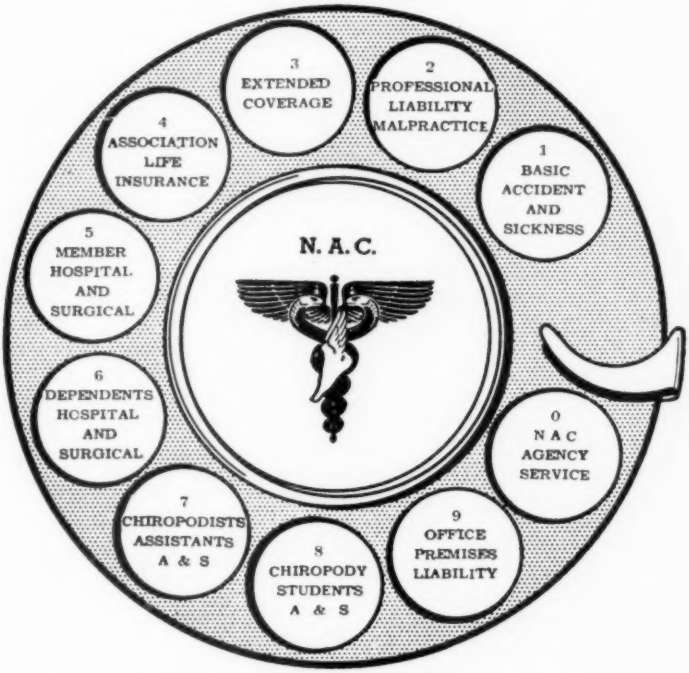

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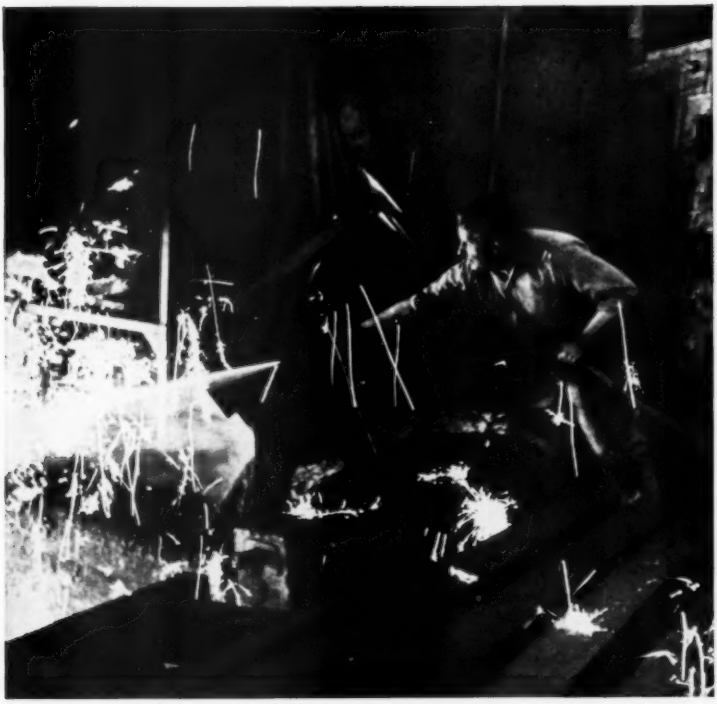

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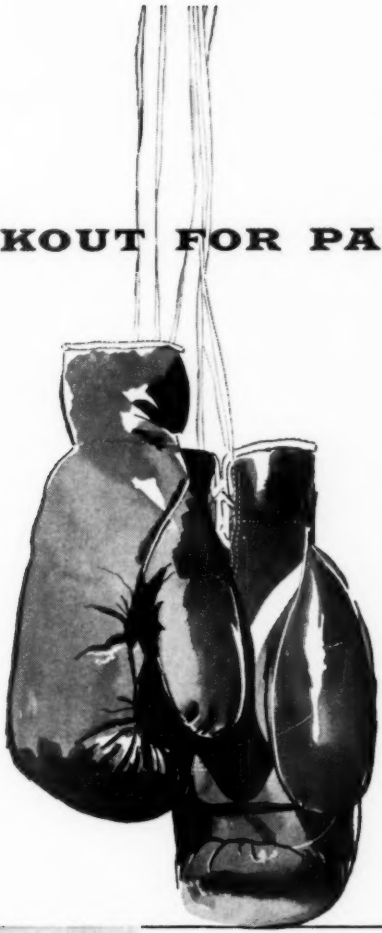

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The Idaho State Board of Chiropody Examiners. **Board Secretary:** Dr. Alma N. Miller, 301 Kane Bldg., Pocatello, Idaho.

Illinois
The Illinois Chiropody Examining Committee will meet in Chicago on December 19-21, 1956 at 160 No. LaSalle Street. Reciprocal applicants are interviewed and examinations will be held on the above date. **Board Secretary:** R. G. Keeley, D.S.C., 621 So. Poplar, Centralia, Ill.

Kansas
The Kansas Board of Podiatry Examiners will hold its next meeting December 7-8, 1956, at the Jayhawk Hotel, Topeka, Kansas. **Board President:** Dr. L. E. Krause, 1107 Williams St., Great Bend, Kansas, or Kansas Board of Podiatry Examiners, 872 New Brotherhood Bldg., Kansas City, Kansas.

Maine
The Maine Board of Examiners in Chiropody and Podiatry will hold its next meeting for examination in November 1956 at City Hall, Portland, Maine. **Board Secretary:** Adam P. Leighton, Jr., M.D., 192 State St., Portland, Maine.

Massachusetts
The next board meeting of the Board of Registration in Chiropody-Podiatry will be held for reciprocity, conditionally, and examination, June and December, at the State House, Boston, Mass. **Board Secretary:** Charles H. Thorner, 1369 Hancock St., Quincy 69, Mass.

Minnesota
The Minnesota Board of Chiropody Examiners will hold its next meeting for examination on June 20, 1957 at the Minnesota State Capitol in St. Paul, Minn. **Board Secretary:** H. W. Leibold, D.S.C., 221 Hamm Bldg., St. Paul 2, Minn.

Mississippi
The Mississippi State Board of Health. **Board Secretary:** Dr. Felix J. Underwood, Old Capitol, Jackson, Miss.

Missouri
The Missouri State Board of Chiropody. **Board Secretary:** Dr. L. A. Hansen, 800 Professional Bldg., Kansas City, Mo.

New Hampshire
The New Hampshire Board of Registration in Chiropody. **Board Secretary:** John S. Wheeler, M.D., 107 State House, Concord, N. H.

New Mexico
The next board meeting of the New Mexico State Board of Chiropody will be held for reciprocity (upon application) and examination on July 13-14, 1957 in Albuquerque, N. M. **Board Secretary:** Morris Haas, D.S.C., 1301 Central Ave., East, Albuquerque, N. M.

North Carolina
The North Carolina State Board of Chiropody Examiners. **Board Secretary:** Dr. Charles Darby, P. O. Box 55, Statesville, N. C.

North Dakota
The next board meeting of the North Dakota Board of Registration in Chiropody will be held for reciprocity and examination on April 21, 1957, at 611 First Ave., No., Fargo, No. Dak. **Board Secretary:** Dr. E. B. Snuff, 611 First Ave., No., Fargo, No. Dak.

Oklahoma
The Oklahoma State Board of Chiropody. **Board Secretary:** Dr. Warren D. Long, 1217 No. Walker St., Oklahoma City, Okla.

Tennessee
The Tennessee Board of Registration in Chiropody. **Board Secretary:** Dr. Arthur Richert, 3355 Poplar St., Memphis, Tenn.

Texas
The Texas State Board of Chiropody Examiners will hold its next meeting on January 25, 26, and 27 in Beaumont, Texas. **Board Secretary:** Dr. Lewis M. Hoppock, P.O. Box 3315, Temple, Texas.

Utah
The next board meeting of the Utah State Board of Chiropody Examiners will be held for examination in July 1957 at the State Capitol in Salt Lake City, Utah. **Board Secretary:** Dr. A. Bowden, First Security Bank Bldg., Provo, Utah.

West Virginia
The next board meeting of the Medical Licensing Board of West Virginia will be held for examination in January 1957 at the State Office Building in Charleston, W. Va. **Board Secretary:** N. H. Dyer, M.D., State Office Building, Charleston, W. Va.

Wyoming
The Wyoming State Board of Registration in Chiropody. **Board Secretary:** Dr. Duane NeuSchultz, P. O. Box 1029, Torrington, Wyo.

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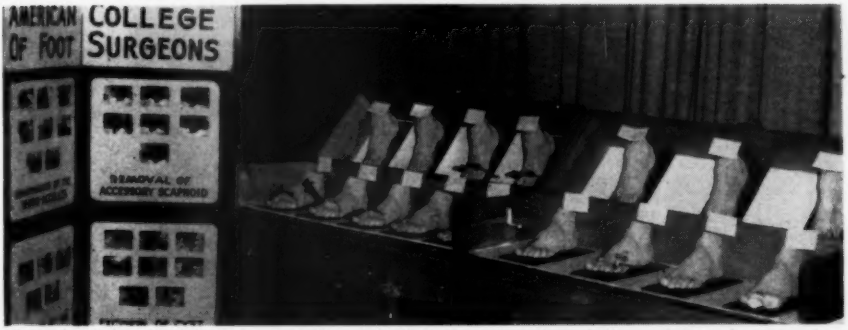
PD-58

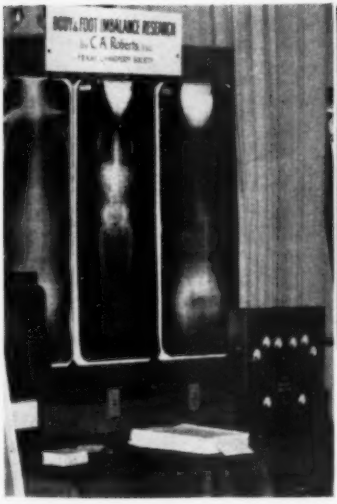
N.A.C. HALL OF SCIENCE
AUGUST 1956

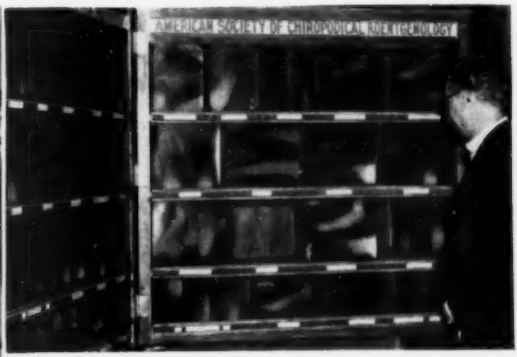
On the opposite page are shown the scientific exhibits rated "best." Above are some of the other exhibits. Center scene is in the Hall of Science Motion Picture Theater.

First, The Preservation of the Function of the Foot, Harry C. Stein, M.D.



Second, Lifelike Models Portraying Chiropodical Surgery, American College of Foot Surgeons, Inc.





▲ Honorable Mention, X-Ray Exhibit, The American Society of Chiropodical Roentgenology.

◄ Third, Body and Foot Imbalance Research, Charles A. Roberts, B.S., D.S.C.

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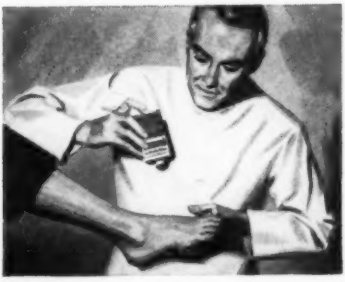

Scientific findings confirm greater effective value of powder

Newest experiments endorse powder as an effective guard against Athletes Foot. Researchers report regular use of a drying, mildly fungus-killing powder prevents dermatophytosis. The findings support the popularity of prevention of fungus infection by powder with both doctors and patients.

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VOLUME 46 NOVEMBER, 1956 NUMBER 11

REACTIONS TO ADHESIVE TAPE

WILLIAM B. IGNATOFF, D.S.C.
Newark, N. J.

Introduction

UNTIL RELATIVELY recent years, the production of dermatitis by adhesive tape was so frequently encountered, it was largely accepted as the inevitable result of its usage. No one came forward with an explanation of the mechanism of such cutaneous irritation, but early investigators reported it was a hypersensitivity to one or more of the ingredients of the adhesive mass. Stauffer[1] stated that, in his experience, the adhesive tape that would not produce irritation did not exist, and Sheldon,[2] in an intensive study of the subject, placed the over-all incidence of reactions at about 50%.

My personal observations and experience are at variance with the aforementioned findings and have stimulated further investigation into this problem.

It is my wish that this report will help to bring about a better understanding of the factors responsible for the complicating symptoms which may appear, following the use of adhesive tape.

Construction of Adhesive Tapes

During the last few years, manufacturers have recognized the great potential importance of this problem. They have accepted the challenge of converting the manufacture of adhesive tape from an art to a science. The studies have produced a more physiologically acceptable type of formulation. Thus, with the lid of secrecy lifted, the future will show a tremendous lessening of adhesive tape reactions.

Adhesive tapes consist of two essential materials. First, there is the so-called backing material which may consist of a woven fabric which may or may not be covered with a waterproof coating such as nitrocellulose, or may consist of a continuous flexible plastic film as, for example, a plasticized vinyl copolymer such as the popular plastic band-aids.

The other constituent is the adhesive mass, which may be applied to the backing by heat or pressure in the so-called calendering process, or by varied solvent spreading techniques.

The adhesive type masses generally include: 1. An elastic substance either natural rubbers, synthetic elastomers or a combination of both. 2. Plasticizers to prevent undesirable hardening, as for example, lanolin or liquid petrolatum. 3. Antioxidants are usually added to prevent deterioration due to oxidative processes. 4. Fillers and whitening agents are

commonly included, as starch, talcum or zinc oxide.

Causes of Reactions to Adhesive Tape

When adhesive tape masses consisted of complex mixtures of organic compounds, it was little wonder that many workers placed most reactions to the substances on an allergic basis. More recent work, however, has indicated that a true allergic response to adhesive tape mass, or its components, is present in a relatively small proportion of the cases. Various other forms of dermatitis are far more common. My observations and a series of patch tests have convinced me that these ingredients are not alone responsible for all the reactions we have encountered.

I was not concerned in this study with the techniques of strapping. The only concern was the skin, its preparation prior to being covered with adhesive tape and the resultant cutaneous reactions produced.

Hence, in the test studies, in applying adhesive tape to both feet, one foot was prepared in the conventionally accepted routine of cleansing the skin and drying it well, making certain there were no oily secretions, moisture, dust or powder film present, since these do interfere with tape adhesion. Efficient skin cleansing was produced with the use of carbon tetrachloride. The second foot was painted with tincture of benzoin compound, or one of the other popular skin adherents prior to strapping.

Removal of the adhesive was done gently. Ripping or tearing many produce considerable irritation, not only to the skin, but in the patient's attitude towards you. Here too, carbon tetrachloride is fairly effective and certainly less irritating to the skin than benzine.

Etiologic Classification of Adhesive Tape Reactions

The classification of cutaneous changes associated with the wearing of adhesive tape is basically simple. The causative mechanism may not be readily apparent in every case and occasionally more than a single causal factor may be present in a single case.

This classification offers a ready means of cataloguing various types of tape reactions under practical clinical conditions. On this basis, and in the ascending order of frequency, the various manifestations fall into four broad categories: 1. Allergic. 2. Bacteriologic. 3. Chemical. 4. Mechanical.

Allergic Reaction and Therapy

Specific cutaneous hypersensitivity to an adhesive mass or components has proven to be very uncommon. In 350 cases of patch testing we saw superficial irritations in one out of six patients (about 16%), but specific cutaneous hypersensitivity to components of the adhesive mass proved that only three (less than 1%), were true allergic responses.

These findings compare favorably with those of Grolnick,[3] when he reported that he saw, in a series of 275 patients, two cases of this type, despite having seen significant irritations in one out of six patients.

It was his opinion, and this I can readily confirm, hypersensitivity to adhesive tape is more frequently encountered in individuals known to exhibit hypersensitivity to other substances.

Allergic manifestations produced by adhesive tape are characterized by erythema, edema, papules vesicles and, in severe cases, desquamation. Itching may be intense, or it may be absent.

The reaction is readily demonstrated by patch testing, and usually manifests itself early within 24 to 48 hours. Characteristically, the reaction becomes more severe the longer the tape is left in place and continues to increase in intensity for some time after the tape is removed. This type of reaction is long lasting and requires days, sometimes weeks, for its complete subsidence.

Occasionally the response is so intense that it spreads beyond the margins of the patch (primary irritation usually does not) and may even produce a generalized urticaria. In twenty years, I have seen one such case. This patient was sent to the hospital with a generalized urticaria.

For relief during an allergic reaction: 1. Remove the adhesive tape. 2. The prescription of the oral antihistamines are generally of some value. 3. It may be necessary to prescribe a sedative if the itching is intense. 4. The local inunction of hydrocortisone ointment is frequently effective in controlling the inflammatory reaction. In severe and spreading reactions it may be necessary to resort to the steroids internally. 5. Compresses of cold Burrow's solution, compresses of cold milk or the application of calamine lotion may give relief.

Bacteriologic Reaction and Therapy

The bacteriologic reaction is not in reality a primary etiologic entity, but it is rather a superimposition of infection upon one of the other types of reactions originally in one or the other etiologic categories. Here we may see a folliculitis or pyoderm, and for all practical purposes we might say that there is an involvement of the hair follicles and adnexal glands.

The theory that the incorporation of fatty acids or their salts into adhesive tape masses would substantially reduce the occurrence of bacteriologic reactions has not yet been convincingly substantiated. It seems reasonable to believe that individuals who are usually susceptible to infectious skin lesions, perhaps because of factors related to individual immunity, are most liable to present this type of reaction to adhesive tape. Proper cleansing technique, however, may help to minimize this reaction.

For relief of symptoms accompanying a bacteriologic reaction: 1. Remove the adhesive tape. 2. The inunction of an antibiotic ointment, as Bacitracin, Baciguent, Spectrocin or Bacimycin, may be of value. 3. If the reaction is severe and extensive, the sulfonamides or one of the antibiotics, systemically, may be necessary. 4. With either of these therapies it is also recommended that warm compresses to the affected areas be employed, as boric acid in saline, or Aveeno.

Chemical Reaction and Therapy

The occurrence of chemical irritation has been substantially reduced because of research towards the improvement of adhesive masses. Some years ago it became obvious that various resins were capable of producing irritation, which was of a primary contact nature. The substitution of plantation grown rubber for wild rubber greatly lowered the content in the raw materials of such primary irritants as creosotes, tar and acetic acids.

Another factor which has materially furthered the reduction of chemical irritation has been the development of more effective stabilizers or antioxidants which prevent the formation of irritating breakdown products. Obviously

the occurrence of this type of reaction must be nonexistent or negligible in a tape which can be regarded as clinically acceptable.

The possibility that the hydrogen ion concentration at the interface between the skin and the adhesive mass as having a bearing upon the incidence of irritation has received considerable attention. Various investigators have reported a general rise in ph at the interface when tape is worn for several days. However, there does not seem to be convincing evidence that this rise in ph bears any direct relationship to either the frequency or severity of chemical irritation.

Mention should also be made here of the usage of various chemical substances, such as tincture of benzoin compound, or certain proprietary preparations for application to the skin prior to strapping with adhesive tape.

Some clinicians use these materials routinely and strongly advocate them, while others are equally vociferous in their opposition. Kligman[4] found that the usage of one of the more widely used proprietary preparations gave an impression of increased tackiness immediately following its usage when the adhesive tape was applied, but that subsequently its sticking qualities deteriorated so that strips of tape applied over it loosened and came away after a shorter period of contact than was the case with the same adhesive tapes applied directly to the clear skin. My experience with this same proprietary material and with benzoin supports Kligman's views. Further, one of the most s e v e r e inflammatory reactions which I have ever seen beneath adhesive tape I have described under the section on allergic reactions. It occurred in association with the application of a small amount of adhesive tape over a bunion joint. In this case the skin had been previously painted with compound tincture of benzoin. This was felt to be an allergic type of response to the adhesive. In all fairness, however, it must be pointed out that many individuals who use tremendous amounts of adhesive tape in their clinical endeavors use compound tincture of benzoin routinely prior to application of the tape, and have not observed any untoward effects.

For relief during a chemical reaction: 1. Remove the adhesive tape. 2. Ethyl chloride sprays over the affected or involved areas every other day hasten to abort the uncomfortable symptoms. 3. Cool compresses should also be employed.

Mechanical Irritation and Therapy

There seems to be ample evidence to support the belief that the great preponderance of reactions to adhesive tape is based upon various factors which are of a mechanical nature.

The most common form of this type of phenomenon is the so-called reaction of removal, which manifests itself as a diffuse reddening of the skin. It usually becomes immediately apparent as the tape is removed, or may occasionally appear a few minutes afterwards. It is believed to represent a reaction of the capillary vessels in the skin to the pulling away of the tape, and is of short duration and of little clinical significance.

Another phase of adhesive tape reaction, probably not entirely mechanical in nature, but most likely concerned with chemical influences, is the effect of adhesive tape upon the sweating mechanism.

Reports of sweat retention by

adhesive tape, (Shelley[5] and Horvath[6]), the relationship between emotional stress and sweating, and the accumulation of allergenic substances beneath the adhesive, (Frumess[7]), the occlusion of sweat glands, the hyperkeratotic plugging of the sweat duct orifices, (Peck[8]), have been made by investigators, and undoubtedly, the nature of adhesive tape masses and the duration of its application to the skin are of great importance. Climatic factors, occupation, emotional stress, variations in numbers of sweat glands in the skin of different individuals, and in different skin areas of the same individual, all indicate the variable factors involved.

This whole question may also be intimately related to the transpiration of water vapor and the ability of the tape to "breathe." One of the most important metabolic functions of the skin, of course, is to excrete a portion of the body's insensible water loss, which may amount to some 1200 to 2000 cc. per day.

It is not unlikely that if this function is interfered with over a substantial area by adhesive tape, an unfavorable set of circumstances is created, the end result being manifested by various irritative phenomena.

We may not like to face this next fact, but frequently we in practice are guilty of inducing a type of reaction, mechanical in nature, when we apply adhesive tape for the purposes of support and relative immobilization. There seems to be a general uncontrollable tendency to apply the tape very tightly, especially by those early in practice, with the hope that the tight strapping will provide maximum symptomatic relief.

Adhesive tapes applied under too great tension may show a tendency to tear. The adhesive quality of the tape may be insufficient to withstand the tension and become detached from the skin, or if the tension exceeds the physiologic tolerance of the skin to which it is applied, it may produce trauma up to and including actual disruption of the layers of the skin.

This may be manifested by erythema, vesicles or excoriated areas, which usually occur at the skin areas covered by the ends of the strips of tape. These skin traumas may then present a hazard of secondary infection.

Those who are expert in the use of adhesive tape for purposes of strapping generally agree that the development of precise skill in estimating and using the maximum degree of tension, which is within the limits of tolerance of an individual skin, is not easy and may require considerable experience. Individual skin tolerance to shearing stresses would seem to vary with such factors as the elasticity of the skin, its texture, and the amount of subcutaneous fat in a given area. Obviously, these may in turn be influenced by age, sex, nutritional state, physical habitus, and probably many other considerations.

Very frequently, a tanning of the skin under tape will be observed several days after its removal, even though no acute reaction had been previously observed other than a marked reaction of removal. It probably represents nothing more than a normal response of the skin to trauma. When marked, the reaction resembles a solar tan with branny desquamation and takes about as long to fade. Occasionally also, a rather prolonged local hyper-pigmentation may be observed following the application of adhesive to Negroes.

Those tapes which contain antioxidants, such as agarite alba, have

been known to produce marked areas of depigmentation, more frequently in Negroes. The use of adhesive tape on the Negro is one of the great hazards. It has resulted in lawsuits in those cases where the tape had been used as a protective agent against occupational injuries.

The physical characteristics of the adhesive mass may also be a factor in mechanical irritation. Should the adhesive quality or "tack" be above or below certain well-defined physical limits, the incidence of mechanical irritation may be increased or the tape may fail to stick. Another factor that may influence mechanical irritation is the degree of "slip" the tape will permit yet continue to give satisfactory adhesiveness.

For relief of symptoms occurring with mechanical irritation: 1. Remove the adhesive tape. 2. Cool compresses and soothing emollient preparations usually produce the desired effect. We have found Desitin Lotion to be of value in this therapeutic application.

Compilation of Replies to Questionnaire

Following the presentation of this subject matter at the Annual Meeting of the National Association of Chiropodists in Chicago in 1954, at the Chiropody Association of Florida convention in October, 1954, and at the meeting of the North Philadelphia Division of the Chiropody Society of Pennsylvania in March, 1955, I distributed a questionnaire to which there were 363 replies.

It was my purpose to attempt to arrive at a compilation of chiropodical practice habits in the use of adhesive tape, and to also determine what experiences with adhesive tape our colleagues might report. The findings demonstrate that:

1. All but two, i.e., 99%, apply some form of skin adherent prior to strapping. Tincture of Benzoin Compound – 137 (37+%). Mowbray's Skin Adherent – 119 (32+%), Rubber Cement – 49 (13+%), Larsen's Balm – 32 (8+%), Stazon – 19 (5+%).

2. Of the 363 replies, 335 (95%) reported that they cleansed the skin prior to applying a skin adherent. The cleansing procedures were as varied as the available defatting or degreasing agents.

3. In reply to the queries: Have you found that the use of a skin adherent? a. Makes it easier to apply adhesive?

358 (98+%) yes; 5 (1+%) no. b. Causes strappings to stay on longer? 343 (94%) yes; 20 (5+%) no. c. Allows adhesive tape to be removed more easily? 341 (93+%) yes; 22 (6+%) no.

4. The variety of solvents employed to aid in the removal of adhesive tape included: Benzine–172 (47+%); Carbon Tetrachloride–116 (31+%); Ether–31 (8+%); Naphtha–28 (7+%); Acetone – 9 (2+%); None – 7 (1+%).

5. The reported incidence of adhesive tape reactions ranged from: None–30 (8%); Less than 1%–195 (53%); 1%–96 (23%); 2%–21 (5%); 10%–10 (2%); 15–20%–9 (2%); 50–75%–2 (.5%).

6. The chiropodist uses an average number of 5½ tubes of adhesive tape (12 inches by 10 yards) per month.

Summary and Conclusions

1. Cutaneous irritations following the use of adhesive tape are not an inevitable reaction, since manufacturers are marketing a more physiologically acceptable type of formulation.

2. The various manifestations of adhesive tape reactions, in their

ascending order of frequency, fall into four broad categories: a. allergic; b. bacteriologic; c. chemical; d. mechanical.

The true allergic response occurs in less than 1% of those exposed to adhesive tape.

3. Of the many factors involved in producing the mechanical type of reaction to adhesive tape, its improper application is the most frequent offender.

4. A compilation of replies to a questionnaire answered by 363 chiropodists proved that 99% of those interrogated use some form of skin adherent prior to strapping, 95% cleanse the skin prior to applying the skin adherent, 98% were of the opinion that the use of a skin adherent was of some value and over 50% reported they encountered less than 1% cutaneous irritation with the use of adhesive tape.

The author wishes to acknowledge his gratitude to Jacob Bleiberg, M.D., Newark, N. J., for his helpful consultations during this study and for his assistance in the preparation of these data. He expresses appreciation for the helpful consultations and aid by John Henderson, M.D., Medical Director; J. M. Thompson, M.D., Associate Director of Clinical Research; Robert T. Osterlund, Director of Professional Service, and Arthur P. Meares, Products Director of Johnson and Johnson, New Brunswick, N. J., and for the informative correspondence received August 27, 1954, from W. O. Elson, Head of Medical Research, Bauer and Black, Chicago.

64 Lyons Ave.

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"Fanaticism consists in redoubling your effort when you have forgotten your aim."

George Santayana

THE ARTHRIDITIES AND ALLIED DISORDERS AS FACTORS IN EVERYDAY CHIROPODY PRACTICE AND THEIR TREATMENT‡

RAYMOND K. LOCKE, D.S.C., F.A.S.C.R.
Englewood, N. J.

PART II

Techniques

Materials Needed: Small office tray containing the following sterile materials.

1. Germicidal scrub solution * (pHisoHex^r, etc.)
2. Antiseptic solution
3. Alcohol sponges
4. Dry sponges
5. Local anaesthetic solution**
6. Hydrocortisone acetate, prednisolone acetate.
7. 2 Syringes: 1cc. (tuberculin type), 2cc., 5cc., according to site of injection as described in text.
8. 2 Needles: 25-22 gauge, 1″-2″ length, according to site of injection. (The larger gauge needles are necessary for the steroid.)

Note: Separate syringes and needles are used for anaesthesia and the steroids. It is also advisable to use a dry syringe for these steroids to avoid dilution and possible impairment of efficacy.

Intra-articular: Wherever possible, the exact location of the joint space should be palpated and marked. After thorough scrub and antiseptic measures, the area (skin and capsule) to be injected is anaesthetized by infiltration. Traction on this joint, wherever possible, will aid entrance into the intrasynovial space. It may be necessary to "tease" the needle into the smaller joints. Injections into the ankle or larger tarsal joints require a long needle (22 gauge, 1½″ or 2″). (Fig. 16.)

Hydrocortisone or prednisolone, in dosage according to size of joint,

Fig. 16—Injection into ankle joint.

is injected into the synovial space. The following average doses of hydrocortisone and prednisolone have been employed:

1. In the ankle and tarsal articulations — 12.5 to 25 mg.
2. In metatarsal and phalangeal articulation — 10 to 15 mg.
3. In interphalangeal articulations — 5 to 10 mg.

It is difficult to aspirate synovial fluid from the joints of the foot; however, where possible, this should be done and by a barbotage-like action the steroid injected. Resistance on aspiration or injection of the hormone indicates that the needle is not in the intrasyno-

‡ Part I of this article was presented in the October 1956 issue, Vol. 46, No. 10.
* (pHisoHex^r)—Winthrop Laboratories, New York, N. Y.
** Novocainer—Winthrop Laboratories, New York, N. Y.

vial space and should be repositioned. Following injection, the needle is quickly withdrawn and a sterile patch dressing applied where indicated. Orthopedic measures such as strapping, padding, etc., may follow immediately after injection. It may be well to instruct patient regarding the possibility of post-injection pain and prescribe relief measures.

Periarticular: The method of preinjection preparation and anaesthetic infiltration is the same as described above. Following anaesthesia, the steroid is infiltrated into the periarticular tissues. Dosage varies according to size of area so indicated above.

Fig. 17—Medial approach for injection of calcaneal spurs.

Bursitis: In bursitis, aspiration is advisable, prior to instillation of the hormone into the bursal sac. Five to fifteen milligrams of the steroid is injected.

PRECAUTIONS: Under no circumstances should an area suspicious of infection be injected.

Calcaneal Spurs: A long needle (22 gauge — 1½″ — 2″) is employed, 3 to 5cc. of Novocaine is infiltrated into the involved area, making sure that the needle point contacts the bone in the immediate area involved and is then drawn back about ⅛″ to ¼″ before injection is made. The syringe is then disconnected with the needle left in place (Fig. 17) and the syringe containing the corticosteroid is then attached and the hormone infiltrated. Usual dosage employed is 25 mg.

The method of locating the spur is most important in order to deposit the steroid where it will produce its optimum effects. This may be done by palpation of the point of tenderness and also by measurements obtained from the radiograph providing no distortion is present in the image and soft tissue is adequately visualized. We have found the medial approach to be the method of choice, thus avoiding the plantar tissues. (Fig. 17.)

Ganglion: These are usually present on the extensor surfaces of the foot and ankle and often follow trauma. Aspiration following local anaesthesia by infiltration is employed. However, the technique here is modified by also injecting procaine into the ganglion itself; this is done in order to dilute the gelatinous contents of this lesion. A large gauge needle must be used (16 to 18 gauge) and a 10 cc. or 20 cc. syringe is essential to provide greater suction. After aspiration, the needle is disconnected from the aspirating syringe and the syringe containing the corticosteroid is attached and the contents instilled into the ganglion. Dose of steroid, according to size of lesion, usually is 10-15 mg. A compression bandage is then applied.

Sprains: The involved area is infiltrated with 3-5 cc. of procaine. The injection is fanned in several directions from one or two punctures. Following this, 25 mg. of hydrocortisone is infiltrated in these areas in the same manner. In severe sprains, intra-articular injection may be indicated for its

antiphlogistic effects, to minimize disability and pain and to abort a possible sequel of post-traumatic arthritis.

Morton's Neuralgia: Several patients (Table I) suffering from this condition were injected with hydrocortisone. This treatment was empiric and given in the hope that it would provide relief. The results were disappointing. (Note: The use of hyaluronidase with the steroids is contraindicated since steroids counteract the permeability increasing action of hyaluronidase.[37])

Table No. I shows the effectiveness of intra-articular hydrocortisone and prednisolone acetate injections in various arthritic and periarthritic foot problems. These are grouped according to diagnosis and location. Again, it is worth noting that degenerative joint disease, especially of the traumatic type, has a high incidence in chiropodical practice and that the first, second and third M.P. joints are most frequently affected. Stress is again laid on the high incidence of dislocation and luxations of the second and third M.P. articulations and the high incidence of traumatic arthritis of the first M.P. joint.

A most important observation, at this point, must be made of the fact that supportive therapy and measures to restore the normal mechanics of the involved areas is of prime importance. It was noted throughout all the studies covered by this paper that almost all of the patients in every group showed a better response to injections of hydrocortisone or prednisolone when this therapy was accompanied by supportive measures than by such injections alone.

In the preparation of this paper, in order to assure accuracy of findings, every patient in these series was recalled for re-examination or a report on results, to date.

Steroid Therapy in the Treatment of Heloma

Treatment of the so-called simple corn, both of the heloma durum and heloma molle type by local steroid injection was also undertaken. This treatment was employed with the rationale that helomata frequently were associated with underlying capsular or joint changes as described earlier and that the injection of an antiphlogistic drug such as hydrocortisone or prednisolone would prove of benefit.

It is also well established that adventitious bursae (Fig. 20) are frequent complications of helomata. These may occur under the identical conditions which produce corns of various types. Based on these facts and the evidence submitted early in this paper, the author began a series of injections with hydrocortisone and prednisolone acetate into the structures involved in these lesions. Shortly after initiating this therapy it became apparent that this approach had merit. Patients who had experienced only short relief periods with all methods previously employed in the treatment of corns reported greater abatement of pain. Furthermore, in most cases, reappearance of the growth was usually delayed and the excrescence frequently diminished in size and severity. The results were dramatic and, not infrequently, the helomata regressed completely. (Figures 18-21) illustrate several of these cases, which, incidentally, had resisted all previous efforts at treatment. Table No. II demonstrates the results of this series in which 194 patients were treated. It is important to emphasize that all necessary supportive measures must be maintained and that this method of treatment is not advocated as a panacea.

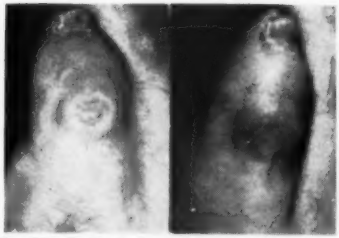

Fig. 18—Left, heloma durum in patient with rheumatoid arthritis. Right, complete regression and absence of edema after one injection of hydrocortisone.

Fig. 19—Left, heloma durum with adventitious bursa, female, age 79, note hammer toe. Right, after injection, note complete absence of heloma and bursa.

TECHNIQUE. The area to be injected is prepared with alcohol sponge and antiseptic. Since injection of toes is usually accompanied by some pain, ethyl chloride spray is used to minimize the initial phase of the injection. A tuberculin type 1 cc. syringe is used to keep pressure to a minimum and 1 cc. of 2% Novocaine is slowly infiltrated into the tissues with frequent pauses to allow the fluid to diffuse. The tissues adjacent to and underlying the corn are infiltrated, followed by injection of 5 to 7½ mg. of hydrocortisone or prednisolone, intradermally into the lesion or underlying bursal sac. Post injection pain has been minimal and relatively infrequent.

The photographs which follow, show "before" and "after" studies of specimen cases selected from the group of 4+ results. It is worth noting that, in almost all cases where the proper supportive measures were followed through by the patient, the results were in the latter three columns. Results ending in failure and in 1+ were those in which a high percentage of the patients did not cooperate fully or in which other factors such as marked exostoses were present and surgical measures were indicated.

It may be safely said that the employment of corticosteroids as adjunct therapy in the treatment of helomata has a definite place in the treatment of the foot.

Neuro-Fibrous Heloma

Table III represents a preliminary study following a new approach to the treatment of one of the most intractable and chronic problems in chiropody practice. This study is still too early for conclusive opinions but this method of treatment appears to show promise. These lesions are frequently referred to loosely as "plantar warts." However, most chiropodists tend to delineate the true plantar wart from the neuro-fibrous heloma (Fig. 22) which may follow a chronic verruca plantaris. These opinions appear to have considerable merit based on a vast clinical experience and very intimate association with these problems which constitute a major part of the chiropodist's practice. Patients suffering from these intractable lesions usually obtain relief, often incomplete, for very short periods regardless of measures employed and become quite discouraged. The cliche, "the bane of one's existence" may be applied with justification to the neuro-fibrous heloma.

A group of patients with long-standing neuro-fibrous plantar lesions were injected with prednisolone acetate.

TECHNIQUE. Intra-dermal injection of 1 cc. of procaine was employed (Fig. 22, second from top), followed immediately by the slow intra-dermal injection of prednisolone acetate suspension directly into the lesion. (Fig. 22, second from bottom).

TABLE NO. II

This Table Illustrates the Results Obtained in the Treatment of Heloma Durum and Heloma Molle with Corticosteroid Therapy

Name	Age	Sex	H.D. No.	H.D. Location	H.M. No.	H.M. Location	No. Injections	Intervals Bet. Weeks	Associated Disorder	Patient Cooperation	Duration of Improvement thus far—(In Mos.)	Degree of Improvement 0+	1+	2+	3+	4+
I.H.	40	F	2	R&L-5	–	—	1	—	—	G	3½	—	—	—	X	—
R.H.	72	F	2	R&L-4	–	—	1	—	Mild hammer toes	F	2	—	—	X	—	—
M.G.	54	F	1	5th	1	Bet. 4&5	2	3	—	G	3	—	—	—	—	X
E.G.	47	F	2	R&L-5	–	—	2	3	Adv. Bursa	G	3	—	R	—	—	L
H.G.	52	F	2	R&L-5	–	—	2	1	Slight Exostoses	G	3	—	L	—	—	—
W.F.	38	M	2	R&L under 5 met. head	–	—	1	—	Improper Shoes	G	2	—	X	—	—	—
M.F.	46	F	4	R&L-4&5	–	—	1	—	—	G	5	—	—	R/L 5	—	R/L 4
F.F.	44	F	1	5th	–	—	2	6	Exostoses	G	1½	—	X	—	—	—
E.E.	71	F	1	4th	–	—	2	10	Hammertoe	G	2½	—	—	X	—	—
J.E.	21	F	1	5th	–	—	1	—	—	F	3	—	—	—	—	X
M.DeB.	34	F	3	R&L-2&5	–	—	1	—	—	P	2	—	—	X	—	—
A.D.	34	F	–	—	1	Bet. 4&5	2	3	—	F	1	—	—	X	—	—
E.C.	51	M	1	5th	–	—	1	—	Slightly contracted toe	G	4	—	—	—	—	X
R.C.	34	F	1	5th	–	—	1	—	—	G	5	—	—	—	—	X
A.C.	58	F	1	2nd	–	—	2	2	Hammer toe. Exostoses Required surgery	G	–	X	—	—	—	—
G.C.	43	F	–	—	1	Bet. 4&5	1	—	—	G	3	—	—	—	—	X
F.B.	34	M	1	5th	–	—	1	—	—	G	3	—	—	—	—	X
E.Y.	67	F	2	R&L-5	–	—	2	3	—	F	3	—	—	—	X	—
V.W.	21	F	2	R&L-5	2	Between 4&5-R&L	1	—	Exostoses Req. Surg.	G	–	X	—	—	—	—
E.W.	57	F	1	5th	–	—	1	—	—	G	1½	—	—	—	—	X
H.W.	56	F	2	R3&L5	–	—	1	—	—	F	1¼	—	L5	—	R3	—
J.W.	49	F	1	5th	–	—	1	—	Adv. Bursa	F	5	—	—	—	—	X
A.T.	55	F	1	4th	–	—	1	—	Adv. Bursa & moderate hammer toe	F	1½	—	X	—	—	—
V.T.	39	F	2	R&L-5	–	—	2	2	—	G	2	—	—	—	X	—
J.S.	20	F	2	R&L-5	–	—	3	1	Contracted toes & adv. bursa	P	1	—	X	—	—	—
D.S.	39	F	1	5th	–	—	1	—	—	F	1	—	—	X	—	—
E.M.	53	F	2	R&L-5	1	Bet. 4&5R	3	2	Exostosis (H.M.)	G	1½	—	—	—	—	X
D.L.	51	F	–	—	1	4th	1	—	—	P	–	X	—	—	—	—
C.M.	40	F	1	5th	–	—	1	—	—	F	2	—	—	X	—	—
M.S.	80	F	1	3rd	–	—	1	—	Hammertoe & adv. bursa	G	1½	—	—	—	X	—
C.S.	53	F	1	5th	–	—	1	—	Talipes equinus	G	–	X	—	—	—	—
O.R.	53	F	1	2nd	–	—	3	3	Hammertoe & adv. bursa. Required surgery	G	–	X	—	—	—	—
E.N.	48	F	1	4th	–	—	1	—	Adv. Bursa	G	3½	—	—	—	—	X
T.M.	65	F	4	R-2&4 L-2&5	–	—	3	3-4	Osteoarthritis, hammer toes & adv. bursa.	G	¾	—	—	—	X	—
S.M.	57	F	2	R&L-4	–	—	2	2	Moderate hammer toes & adv. bursa	G	2	—	—	—	L	R
E.McM.	41	F	2	R4&L3	–	—	1	—	Moderate hammer toes & adv. bursa	P	1¾	—	R	—	L	—
J.McM.	70	M	1	R5	–	—	1	—	—	F	1½	—	—	—	X	—
P.BM.	74	M	–	—	1	Bet. 1&2	2	1	Exostosis	G	1½	—	—	—	X	—
D.M.	35	F	1	R5	–	—	1	—	Slight Exos.	F	5	—	—	—	X	—
J.C.	31	F	–	—	1	Bet. 4&5	1	—	—	P	5	—	—	X	—	—
O.R.	49	F	–	—	2	Bet. 4&5, R&L	1	—	Exostoses	P	–	X	—	—	—	—
V.B.	72	F	–	—	1	Bet. 4&5	1	—	Severe weekfoot & lack of adipose tissue	G	–	X	—	—	—	—
B.K.	23	F	1	R4	–	—	1	—	Adv.	F	3	—	X	—	—	—
							1	—	bursa	P	–	X	—	—	—	—
P.K.	42	F	1	5th	–	—	1	—	—	G	3	—	—	—	X	—
M.K.	64	F	1	Bet. 4&5	–	—	1	—	—	G	2	—	—	—	—	X
J.S.	23	F	1	5th	–	—	2	4	Slight Exos.	F	–	X	—	—	—	—
S.B.	48	F	–	—	1	Bet. 3&4	1	—	—	G	3	—	—	—	—	X
M.W.	59	F	2	R&L-5	1	Bet. 4&5	2	—	Exostoses	P	–	X	—	—	—	—
M.T.	64	F	1	5th	–	—	1	—	—	G	5	—	—	—	X	—
F.S.	58	F	1	5th	–	—	2	2	—	F	1	—	X	—	—	—
L.N.	65	F	1	4th	–	—	1	—	Osteoarthritis, hammer toe, adventitious bursa	P	1	—	X	—	—	—
51 Cases			TOTALS				74				2½ AV.	10	11	9	13	16

* Patient Cooperation: Degree of cooperation by patient in following through with supportive measures as described in text.

P — Poor F — Fair G — Good

0+ — No relief (relief, if any, no greater than with ordinary palliative measures)
1+ — Fair relief, slightly better than with previous treatment.
2+ — Good relief of pain and longer freedom from regrowth of excrescence than with conventional treatment.
3+ — Major improvement in which the heloma recurred but markedly diminished in size with much longer relief period.
4+ — Complete regression to the time of this writing.

Treatment of heloma by this method was started five months previous to this writing. Results, therefore, are based on this length of time and the report is necessarily of a preliminary nature.

In addition to corticosteroid injection therapy, wherever indicated, standard chiropodical procedures were followed as supportive therapy.

Fig. 20—Left, heloma durum with adventitious bursa, male, age 79. Right, after injection, complete regression, absence of edema and contracture of toes.

Tuberculin syringes and #24 needles are employed to minimize pressure, always a factor in plantar injections, especially into an area as fibrous as these lesions. The dose employed varied from 5 to 10 mg.

SUPPORTIVE MEASURES. Supportive measures such as employed in conventional treatment were most essential. Among these were static or dynamic moulds, shoe therapy in the form of padding wedging and bars, and the use of buttress or crest padding and balance therapy.

The patients selected for this series all presented neuro-fibrous lesions of the most chronic and stubborn type which had resisted all measures previous to this approach. Among these were x-ray and radium therapy, liquid nitrogen, carbon dioxide snow, potential cautery by the use of various acids, surgical excision, electro-surgery by desiccation, fulguration and negative galvanic electrolysis. In almost every case, various orthopedic measures such as padding and balance therapy had also been tried.

Table No. III indicates the effectiveness of the treatment, to date. It can be safely said on the basis of the results obtained up to the time of this writing, that in almost every instance, each patient has reported relief to a degree never attained by previous measures and, in fact, several of the most chronic and persistent lesions have responded with almost complete or complete regression. A number of these patients required treatment as frequently as every four to six weeks for many years in the past. Several cases, as indicated in the table, reported a history of surgical procedures by excision and/or electro-surgery with subsequent

TABLE NO. III

Preliminary Report on Injection of Meticortilone Acetate for Neuro-Fibrous Heloma

Name	Age	Sex	History & Location of Lesion	Post Injection Report	No. Inj.	Freq. of Inj.—Wks.	Supportive Therapy	Results to Date of This Writing
R.F.	36	F	History of "plantar wart" 2nd M.P. region. History of surgery, x-ray & acid therapy & electro-surgery. Duration—10 years.	Greater relief than with any previous method.	2 2	4	Dynamic Moulds	Lesion appears smaller with markedly diminished tenderness.
K.W.	49	F	History of "plantar wart," plantar 3 MP. 30 yrs. Treated with x-ray, CO^2 snow, acids & various types of shoe therapy & appliances.	No post injection pain. None since.	1	–	Dynamic Moulds	Complete regression.
A.P.	41	M	Duration 15 yrs. History of acid therapy & excision & various types of supports & shoe corrections. 2nd MP plantar.	Relief—"but too soon to tell."	2	6	Inlays & Denver Bars	After 2nd injection reported greater relief than before treatment. Lesion appears smaller & less tender on palpation than previously.
S.C.	34	M	History of lesion 14 yrs. Treated for "plantar wart" by electro-surgery (4 months healing time), x-ray therapy & excision. Recurred with scar tissue. Plantar 2nd M.P.	Mod. severe pain 1st day. Improved since then.	2	6	Dynamic Moulds	Lesions considerably smaller. Surrounding tissue less indurated. No tenderness on palpation.
A.B.	32	F	Small neuro-fibrous heloma plantar 2nd. Duration 13 yrs.	"Feels 75% better without moulds. 100% with."	2	4	Dynamic Moulds	Almost complete regression.
J.C.	28	F	History of treatment for "plantar wart." Excision followed by recurrence with scar tissue.	Marked relief of tenderness. Greater than with any previous method.	2	–	Dynamic	Markedly regressed. Some evidence of lesion still present.
P.K.	55	M	Duration 15 yrs. Plantar 5th met. head. No previous treatment.	Excellent relief	1	–	Properly fitted shoes with aperture pad.	Major improvement. Lesion markedly diminished & symptom free.
D.I.	57	M	Plantar 3rd MP. Duration 13 yrs. Previous treatment, arch supports, shoe corrections, sal. acid, pyrogallic acid.	Slight discomfort for 1 day.	2	4	Inlay to redistribute weight	Mod. regression of lesion. Less induration. Patient reports less discomfort.
F. J.	44	F	Plantar 4th met. head left. Duration of lesion 15 yrs. Prev. treatment, sal. acid, pryogallic acid, arch supports & Denver bars.	After 1st inj., indefinite report. After 2nd, good improvement.	2	6	Dynamic Moulds	Lesion appears somewhat smaller; less induration & pain on pressure or palpation.
F.K.	45	F	History of "plantar wart" 5 yrs., plant. 2nd MP. Previous treatment with sal. acid, electro-surg. (dessication) CO^2, liquid nitrogen & excision.	Mod. relief after 1st inj. Good relief after second.	2	4	Sponge pad	Report after 1st injection, excell. relief for 2 wks., then recurrence of discomfort. Greater relief & longer period since 2nd injection.
F.F.	44	F	2 lesions, one plantar 1st MP. Second under 2nd MP, duration 14 yrs.	Excellent relief after 1st inj.	2	4	Dynamic Moulds	Lesion plantar 1st MP almost completely clear—under 2nd MP shows marked improvement.
R.LaN.	67	F	2 lesions, one plantar 1st MP; dur. 20 yrs. on second plantar 2nd MP. Previous treatment with sal. & pyro. acid, arch supports.	Mod. pain 1st 3-4 hrs. Greater relief since, then c previous treatment.	1	–	Dynamic Moulds	Treatment not followed through by patient to date. Too early for evaluation of result.
E.S.	55	F	Lesion plant. 1st MP 4 yrs. Prev. treatment arch supp. & sal. acid.	Immed. relief c inject., no pain since.	1 1	– –	Dynamic Moulds	Complete regression.
E.G.	42	F	Under 1st MP. Dur. 10 yrs. Resisted all prev. treatment. Sal. acid, padding, shoe therapy & mould.	No pain (post inj.). Excellent relief.	2	2	Dynamic Moulds	Reports marked improvement

Fig. 21—Left, heloma molle, resistant to conventional therapy. Right, after injection, complete regression.

scar formation which are in evidence. Other cases, as indicated, presented a history of x-ray therapy with failure.

As stated previously, this is a preliminary report based on early findings. Although present results with this therapy are encouraging, greater experience should result in improved technics, resulting in more definite conclusions.

Conclusions

Capsulitis, periarthritis, luxations, bursitis, and degenerative joint disturbances appear to be etiological factors in many foot disorders heretofore considered largely from the viewpoint of purely pathomechanical origin.

Further, it is postulated that joint disturbances somewhat analogous to Heberden's nodes may result from the trauma, both clinical and subclinical to which the foot is constantly subjected.

Results of this newer method of treatment of the simple corn and neuro-fibrous lesions while encouraging are still preliminary and bear further investigation. A good start has been made along these lines. It is hoped that in the near future more conclusive data can be obtained and published.

Finally, it should be emphasized that the use of corticosteroids by the injection technique is a relatively benign procedure. In this series only 4 patients showed any untoward side effect. Hollander has reported on incidence of side effects of 0.2% in over 10,000 injections.

Because of these factors a re-

(Continued on Page 777)

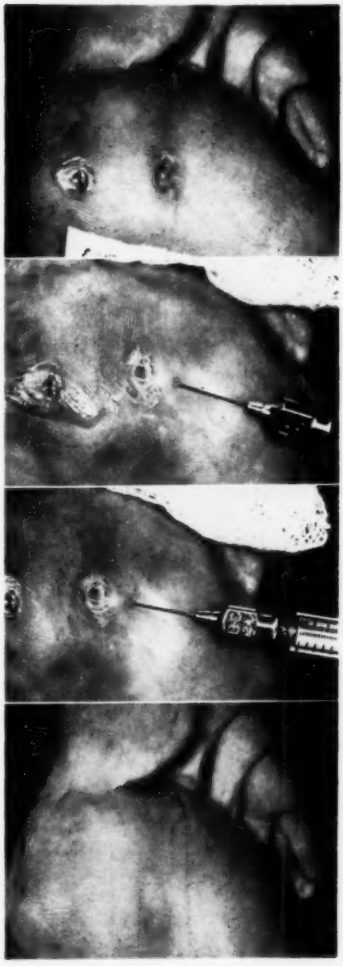

Fig. 22—Neuro-fibrous helomata. Second from top, technic for procaine infiltration. Second from bottom, technic for steroid injection (directly into the lesion). Bottom, complete regression after treatment.

JOURNAL

OF THE

NATIONAL ASSOCIATION of CHIROPODISTS

PUBLISHED UNDER THE DIRECTION OF THE EXECUTIVE COUNCIL
BY THE NATIONAL ASSOCIATION OF CHIROPODISTS

3301 SIXTEENTH STREET, N. W.
WASHINGTON 10, D. C.

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PRESIDENT'S MESSAGE

Universal Inclusion Is Our Goal

ABOUT 110 million people are covered by voluntary health insurance plans in America. The chiropody profession should be included in all contracts that indemnify conditions within our scope of practice. Our profession renders approved health service for the public welfare and is licensed by every state, therefore, no barrier should prevent the public from receiving our attention to foot problems.

Most of the commercial carriers now include our services. We seek an equanimous rapport with voluntary plans that are controlled by medical interests per se. Considerable sacrifice and administrative effort has been given by medical doctors in originating the Blue Cross and Blue Shield systems. We applaud this endeavor. The chiropody profession is in no way trying to invade the prerogatives of medicine; on the contrary, chiropody is an accepted medical entity, a part of the health team providing the public with the best possible foot care. We are willing to do our share of labor in servicing any plan, and stand with medicine for voluntary health insurance plans in stemming the tide of socialized medicine advocates.

An enlightened public turns to the chiropodist for foot care. When an insurance policy restricts the choice of doctors, the public is resentful, thus one of the principles for which Blue Cross and Blue Shield were created is defeated. Our position is valid, consequently we must make a strong state by state bid for consideration by medical society sponsored insurance companies. The estimated 6,000,000 patients visiting chiropodists each year in the United States represent a public awareness that cannot be denied.

The Business Administrator, the Secretary, and the Executive Council of the National Association of Chiropodists are working diligently to improve our position. Many substantial gains have been made by our

acceptance in additional companies. Each state society with the assistance of national headquarters should compile a list of those companies recognizing our claims and those which do not. It will then be possible for every chiropodist to question patients for their protection to determine whether they are insured with a company which is on the approved list.

I recommend that every state society serve the needs of the public and make a concerted endeavor to negotiate inclusion in voluntary prepaid insurance contracts. A brief, containing further advice resulting from the conference on insurance held at our November Executive Council meeting, will be forthcoming to each state president.

This vital goal of universal insurance inclusion will be realized only if every chiropodist shows willingness to contribute dues and to work for its attainment.

FELTON O. GAMBLE, *President*

HEALTH INSURANCE DATA

THE "PRESIDENT'S MESSAGE" this month concerns a vital area of our professional life. How vital is pointed out by the following information by the Health Insurance Council, New York, N. Y. On July 31, 1956, there were 110 million people covered by hospital insurance, 94 million had surgical protection, 58 million had regular medical expense insurance and 7 million had insurance against major medical expense. $2.5 billion was paid out in 1955. During the first six months of this year the benefit payments increased 20% over the same period last year.

CHIROPODY AND THE HEALTH SCIENCES

TAKING CARE of the nation's health today is such a complex and large problem that the services of many kinds of doctors, specialists, technicians, administrators and other highly skilled people are required. There are Doctors of Medicine (and their specialists), Bacteriologists, Physiologists, Psychologists, Biochemists, Biophysicists, Nurses, Dietitians, Physiotherapists, X-Ray and Medical Technicians, Chiropractors, Osteopaths, Orthotists, Optometrists, Sociologists, Pharmacists, Veterinarians, Dentists and Chiropodists.

Many of these receive their training in colleges and universities earning such degrees as, B.A., B.S., M.A., M.S., Ph.D., etc. Others become technically trained through technical courses such as those for X-Ray and Laboratory Technicians. Most of the doctors and some others earn their degree and receive their training at professional schools. Those listed by Selected Service and some of their degrees are medicine (M.D., M.B.), dentistry (D.D.S., D.M.D.), veterinary medicine (D.V.M.), osteopathy (D.O.), optometry (O.D.), pharmacy (Ph.G., R.Ph.), chiropractic (D.C.) and chiropody (Pod.D., D.S.C.).

And of all these categories only a few may diagnose and treat independently. Many perform their functions only when supervised, or directed, or upon instruction from a practitioner licensed to diagnose and treat. Some of the above may diagnose and treat in certain states only.

Practitioners of only three of all the above categories are licensed in all the forty-eight states and the District of Columbia to diagnose and to treat. And they are the Doctors of Medicine, Dentistry and Chiropody (and this has been true for twenty years).

CONGRESS ENACTED

HR 7225, which was reported previously, was enacted into Public Law No. 880. It provides amendments to the Social Security law with regard to Public Assistance that will be of interest to Podiatry-Chiropody. One amendment, principally, revised the medical care plan which will benefit more than 5,000,000 people who now receive public assistance. The federal government presently aids the states in providing medical care to four groups of individuals, namely: the aging (65 years or more), dependent children, the blind and the totally and permanently disabled.

Under the present plan the U. S. pays to the states $14 of the first $17 in the monthly checks for the support of each dependent child as well as half of whatever more it cares to pay up to a limit of $32. For the other three categories the U. S. pays $24 of the first $30 plus half the remainder up to $60. States paying beyond these limits do so on their own. Whereas the states now must include medical costs as part of the $60 and $32 limits, after July 1, 1957, when the new law goes into effect medical care will be a separate item which may be added to the maximums. Thus the limits to which the U. S. will contribute (50%) will be $66 and $35, the extra $6 and $3 per month for average medical costs.

Many states will be adding to this amount with their own funds. At present money for medical care is given by some states directly to the individual who then pays the doctor but under the new plan the states will be required to pay the doctor. The recipient will still be privileged to choose his own physician and the state with the aid of the federal funds (50%) will pay the bill within the stated limits.

Under the present medical care plan the U. S. contributes an estimated $90 million annually to the states and in two thirds of the states most of the money goes directly to the individual on relief while in the rest of the states the medical bills are paid by the states directly. Since the new law goes into effect July 1, 1957, officials of the U. S. Social Security Administration have asked the states to expedite their fiscal arrangements for handling medical care.

Director on Aging: Department of Health, Education and Welfare announces the appointment of William C. Fitch, a career government employee, to be director of a special staff on aging. The newly created job is part of an expansion of the department's activities relating to older persons which was initiated last year and will be continued in the coming year.

National Library of Medicine: At a fitting ceremony on October 1, 1956, Dr. Edward H. Cushing, Deputy Assistant Secretary of Defense (Health and Medical), transferred the Armed Forces Medical Library to the National Library of Medicine under the jurisdiction of the Public Health Service. Dr. Leroy E. Burney, Surgeon General of the Public Health Service, accepted the transfer on behalf of the service.

The National Library is believed to have the finest collection of doctoral dissertations in the field of medicine in the world, a collection estimated to be some 250,000 items totalling 13 million pages. Many of the early specimens go back to the 17th century.

THE WM. J. STICKEL MEMORIAL AWARDS FOR RESEARCH IN CHIROPODY FOR 1957

Sponsored by the
Journal of the National Association of Chiropodists and
The N.A.C. Agency, Inc.

RULES AND PERTINENT INFORMATION

1. Awards will be offered for papers on Research in the field of Chiropody.
2. The monetary considerations provided are as follows:
   First Award—Four Hundred Dollars
   Second Award—Two Hundred Fifty Dollars
   Third Award—One Hundred Dollars
   Fourth Award—Fifty Dollars.
   Fifth Award—Fifty Dollars.
3. The manuscripts will be judged by a Committee appointed by the President and the Executive Council. The Committee is authorized to withhold the granting of awards in the event any or all papers submitted are considered to be of insufficient merit.
4. The recipients of the Awards will be announced at the Annual Meeting of the Association in 1957. The first three award winners will be required to read their papers at the annual meeting.
5. All papers received become the property of the National Association of Chiropodists and shall be available for reproduction in any publication sponsored by the Association. Papers must be original and all rights with regard to publication are assigned to the National Association of Chiropodists. The originals of all submitted papers and manuscripts will be placed in *The Wm. J. Stickel Memorial Library and Museum.*
6. Papers entered must be in the hands of the Secretary by April 15, 1957.
7. Manuscripts should be typewritten and double-spaced. No limits or restrictions are imposed on the number of words, use of photographs, charts, etc.
8. All inquiries concerning the Awards should be addressed to the Secretary. Members desiring to submit papers must make application on a form provided for that purpose which can be obtained from the Secretary.
9. Photographs, diagrams, drawings, statistical charts, etc., will be of value in presenting the subject of your choice.
10. Authors may be required to submit a synopsis, abstract or report of their presentation. This will be for publication in the Journal of the N.A.C. should it be desirable but impracticable to publish the original.

Contributions from The NAC Agency and from J.N.A.C. provide the Awards for 1957.

CLINICALLY SPEAKING

A place for the more informal presentation of reminders, suggestions, notes, observations and technics of value in office practice. Your contributions of short manuscripts or illustrative case histories will determine this section's usefulness.

INTENSIFICATION OF RADIOGRAPHS

V. A. JABLON, D.S.C., F.A.S.C.R.
Danbury, Conn.

It is now possible to intensify a radiograph to bring out some of the less visible densities by use of a new type of toning solution, which has been recently developed and put on the market by the Du Pont Company.* The method is simple and the technique used is one which can be accomplished in normal room light.

Its chief use can be summed up as follows:

1. intensification of underexposed radiographs.
2. when an increased contrast is desired.
3. intensification of some previously exposed films for better contrast—density for visualization.
4. better visualization of soft tissue exposures.

The solution is purchased in one gallon amber glass containers. Either stainless steel or hard rubber trays or containers are used, large enough to accommodate the size of film being processed.

The technique for toning-intensifying radiographs during the normal process of development fixation is as follows:

1. After developing, washing, fixing and washing the film in the usual manner place the fixed film into a tray with the toning-intensifying solution at about 68° F. temperature for about 5 to 8 minutes, continually agitating the film in the solution to acquire a smooth, even color tone. The length of time is dependent upon the amount of toning-intensification desired of the film, the longer the time intensifying the film, the darker the coloring of the radiograph.

2. Upon completion of the above procedure, let excess solution drain off the film into the tray and wash the film in the running water compartment of your developing tank for about 5 minutes. Then place on a drying rack to dry the film in the usual manner.

3. In toning-intensification of previously developed radiographs, it is necessary to immerse the radiograph for 2 or 3 minutes in running water before proceeding with the toning-intensification process. This enables the toning solution to react more evenly.

4. Using this process on films previously developed in the usual manner, brings out many densities which previously may have been overlooked.

5. In doing soft tissue radiography this toning-intensification process is very helpful in bringing out the contrast of the various soft tissue densities.

Unnecessary handling of the film with the fingers will cause a dark discoloration of the fingers. Therefore, the use of rubber gloves may be of help to prevent such discoloration.

Medical Arts Bldg.

*E. I. Du Pont de Nemours Company, Photo Products Department, Wilmington 98, Delaware.

ETIOLOGICAL FACTORS IN MULTIPLE INFECTED ONYCHOCRYPTOSIS

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ONYCHOCRYPTOSIS is a common problem and most frequently results from poor hygienic care, improper cutting of the nails, improper footgear or stockings, trauma, or, deformity of the nail or soft tissue.

Multiple infected onychocryptosis is less frequently seen and presents a more formidable diagnostic and treatment problem. It is the purpose of this paper to present some of the etiological possibilities to be considered.

Laboratory examinations are indispensable in the correct interpretation of infections of the nails either by bacteria or fungi. A complete examination of the patient may be necessary for a correct diagnosis. Systemic conditions may cause multiple onychocryptosis either directly or indirectly, due to disturbance of circulation, enervation and nutrition. At times, lesions of the nails are an indirect consequence of the inflammation of the skin, and directly due to the nutritional or trophic disturbances occasioned by the neighboring inflammation on the matrix or surrounding structures.

1. Improper Nail Prophylaxis: Onychocryptosis is usually seen involving a single border of a nail. When several nails are infected simultaneously, the possibility of an underlying systemic disorder such as diabetes should be considered.

2. Peripheral Vascular Disease: May cause multiple infected onychocryptosis or several infections of a single toe.

3. Acanthoma: Excessive local development of the stratum spinosum of the skin resulting in infection. They are seen on multiple toes and are notably resistant to treatment. Benign acanthoma has been described by Steinberg in previous papers. He reports normal blood chemistries and no characteristic culture in such cases and recommends radical surgery followed by cauterization as previously.

4. Syringomyelia: This disease is manifested clinically by sensory and trophic changes in the peripheral tissues, occasionally paraesthesia analgesia, or the development of one or more Witlows may be the earliest appreciable manifestation of the presence of the disorder.

5. Xanthoma Tuberosum Multiplex: While involvement of the nails is not listed in the texts on the subject, in two cases seen by the writers, the patients had multiple infected nails.

6. Cushing's Syndrome (Basophile Adenoma): Associated with this syndrome are variable backaches, fatigability and ultimate extreme weakness. Acrocyanosis, dryness of the skin, edema of the lower extremities and an unusual susceptibility to infection. Several of the nails are frequently infected simultaneously.

7. Post - Sympathectomy Syndrome: Associated with the increased temperature and hyperhidrosis, frequent involvement of the nails with infection has been noted.

8. Acromegaly (Eosinophilic Adenoma): Patients eventually note an increase in dimensions and shape of feet and hands. X-rays show a proliferation at the tips of the distal phalanges. The nails may become infected easily and several may be involved.

9. Trauma: Trauma may involve any number of toes.

10. Prolonged Bed Rest: Inadequate protection from the bed clothes and contraction of toes with consequent infections of the nails.

11. Moniliasis: Other fungi as well must be considered. Often the primary lesion is a paronychia which is followed by infection of the nail plate. Diabetics and those suffering from avitaminosis are particularly susceptible.

12. Pemphigus: In pemphigus, lesions of the nails are not common, but the formation of bullae about the toes may produce dystrophic changes. Nails may be discolored, pitted, and in some cases nail loss by a process of paronychia. These changes are due to neighboring inflammation and edema interfering with normal nutrition and proper function of the matrix. Similar lesions may be observed in Dermatitis Herpetiformis.

13. Occupational Disease: (a) Bricklayers: (Lime, Cement, Mortar) paronychia; (b) Dyers: (Dyes, Chemicals) paronychia; (c) Mechanics: Trauma: Oils.

14. Tuberculosis: Acute paronychia and tuberculous adenitis have been reported as a result of inoculation with tubercle bacillus about the nail tissues. Usually seen on fingers.

15. Syphilis: Syphilis may affect the nail plate, the nail bed and the periungual tissues. Even when fungi are found, the possibility of syphilis of the nails should be considered as at times the differential diagnosis may be difficult.

16. Eczema: Earliest manifestations in nails are at the root and progress to the free edge, but at times the entire nail plate seems to suffer at once. Often the ungual lesions are preceded by eczematous paronychia.

17. Dermatitis Repens: This is an infectious condition probably due to streptococcus. The periungual tissues frequently are affected, the nail plate becomes partially detached and a water secretion oozes from the nail bed. These lesions form an inflammatory paronychia.

18. Darier's Disease: In this rare disease, there may be lesions of the nails when the eruption is abundant on the extremities. There may be an inflammatory paronychia.

19. Lichen Planus: While lichen planus of the nails is rare in certain cases, the nails may present papular paronychia.

20. Tularemia: In tularemia, the initial lesion may affect the nail bed or the nail walls, with necrosis and destruction of the nail plates.

21. Frölich's Syndrome: Nail problems have been reported in this endocrine disturbance. Toenails were greatly thickened, yellow or brown in color, and there was present, inflammatory paronychia.

22. General debility due to any disease state may be accompanied by multiple paronychias. The authors have seen this occur in alcoholics, old age, tuberculosis, diabetes, advanced carcinoma, etc.

In this paper the term onychocryptosis denotes not only nails that are inverted, but those in which infection is present, and in order to relieve the infection and inflammation, variable portions of the nail must be removed. Frequently a nail or portion of it must be removed even though its contour is normal because the adjacent infected tissue has extended to the nail, and the nail edge acts as a continuing irritant.

While there are undoubtedly other etiological possibilities

which can produce multiple infections of the nails, we have attempted to enumerate most of them to be considered when a problem of this type presents itself. We have not attempted to describe the clinical manifestations of the various factors completely, but have just noted the highlights as related to the nails. A complete clinical description of the individual entities may be found in standard texts.

Summary

Multiple infections of the toenails may have as their etiology many diseases and factors. These are listed as a diagnostic consideration when present with the other general symptoms and signs occurring in each.

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CASE HISTORY OF PLEXIFORM NEUROFIBROMA

BERNARD M. LOCKE, Pod.D.
CARL R. ELLIS, D.S.C.

A TWENTY-YEAR-OLD NEGRO was referred to our dispensary clinic on 10 April 1956. He complained of a mass on his right foot which made walking almost impossible. The lesion had first become apparent during basic training in November 1955; since then it had become progressively larger and more painful.

Examination revealed a circumscribed, protuberant mass the size of a half-dollar, situated anterior and medial to the head of the first metatarsal. It was covered with thick hyperkeratotic tissue which was profusely infiltrated with capillary loops. Pain was referred proximal to the lesion.

We commenced therapy with 60% salicylic acid and debridement for a period of two weeks, removing a ¼" layer of capillary infiltrated hyperkeratosis. A smooth, white, protruding cyst-like structure was revealed measuring 2 cm. in diameter. Aspiration was attempted but no fluid could be withdrawn. X-ray, blood and urine examinations proved to be negative.

At this time the dispensary physicians were called in consultation and a tentative diagnosis of epidermal inclusion cyst was arrived at.

The lesion was excised at the Fort Polk Army Hospital on 1 May 1956. Subjacent to the tumor, a herniation of fat through the plantar fascia had occurred. The fascia was closed with 00 interrupted cotton; the skin was closed with 4-0 silk. Anesthesia consisted of a ring block with 2% xylocaine.

Postoperative therapy consisted of bed rest and sedatives for four days. Healing was uneventful, except for a mild infection which was easily controlled with hot soaks and antibiotics.

Pathologist's report:

Gross:—appears as irregularly shaped piece of fibrous type tissue 2 x 1.5 x 1 cm.; cut section reveals homogenous light gray type tissue.

Microscopic:—section of grossly described tissue reveals a plexiform neurofibroma. The lesion consists of multiple small nerve fibers within which there are proliferations of spindle shaped cells resembling those of Schwann origin. The proliferation of cells is confined to the nerves, with prominent palisading. The cells vary slightly in size, shape and staining characteristics; no evidence of malignancy is observed.

The patient was seen two months postoperatively, and was sypmtom free, with no recurrence of the lesion.

Fort Polk Army Hospital
Fort Polk, La.

A NEW SEPARATING MEDIUM

A. R. BROWN, D.S.C.
Detroit, Mich.

PETROLEUM JELLY and cold cream are the most frequently employed separating mediums when making a cast of the feet. When the cast is removed, the feet must then be cleansed of the remaining grease; this involves the use of an organic solvent followed by the additional cleansing with alcohol. This procedure is messy, malodorous, and time consuming. I have been using a more simplified method, with highly satisfactory results.

Lotocreme (Abbott Laboratories) has proven itself to be an ideal separating medium. Merely apply this lotion to the areas involved and use the casting material in the usual manner. When the cast is hard, it can be easily slipped off. The Lotocreme and any specks of plaster that remain on the feet can be easily removed with an alcohol-moistened cloth. The skin is free of grease, and adhesive materials will stick nicely.

8028 W. Vernor Highway

AN EFFECTIVE TREATMENT FOR HELOMA NEURO-FIBROSUM

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Binghamton, N. Y.

A COMMON perplexing problem to all practitioners and one which often becomes a major disabling problem to the patient is the heloma neuro-fibrosum.

This lesion is a form of heloma in which the pathologic changes have gone on beyond the formation of simple hyperkeratosis. Recent histological studies done by Dr. Marvin D. Steinberg of New York and personally communicated to me, indicate that the pathology of heloma neuro-fibrosum is actually an atrophic epidermal lesion with extrophy of the dermis. The sensitive dermis is thus exposed to pressure and friction accounting for the severe pain encountered in these lesions.

These lesions are found on the marginal surfaces of the foot, under the first and fifth metatarsophalangeal joints, on the inner plantar surface of the interphalangeal joint of the great toe and especially under the 2nd, 3rd, and 4th metatarsal heads.

The pain from these lesions is exquisite and often is more evidenced when the foot is at rest than when bearing weight. Upon palpating these lesions you will find a marble-like fibrous mass much larger than the appearance of the growth at the skin surface.

In the past, the prognosis of heloma neuro-fibrosum has generally not been good in spite of all the various mechanical, chemical and radical therapies at our command. The unfortunate results following radiation therapy and other poorly chosen procedures are well known to all of us.

Four years ago, I had the good fortune to be introduced to Dr. Marvin Steinberg's Vitamin "A" solution* for the treatment of resistance verrucae. During this time we have successfully treated well over 100 cases of mosaic and plantar warts with this solution. About a year ago, we decided to try it on neuro-fibrous lesions. We are in-

*Vitamin "A" solution will be available through Campbell Pharmaceutical Company, 79 Madison Avenue, New York, N. Y., under the name Keramin Injection. (Steinberg's Solution.)

deed happy to report that the Steinberg Vitamin "A" solution has been most effective in the treatment of 23 cases of heloma neuro-fibrosum. The only complication we encountered was itching at the site of injection in 3 cases.

Treatment

The technique employed is similar to that for verrucae as described by Dr. Steinberg:

The area is prepared with tincture of merthiolate and then anesthetized with 2 per cent procaine or zylocaine containing 1-100,00 epinephrine. Using a tuberculin syringe, the Vitamin "A" dispersion is injected slowly into the base of the fibrous lesion. The needle should be left in place after the injection is completed for one-half minute to prevent leakage. To further prevent leakage the injection can be accomplished with one needle puncture by replacing the procaine syringe with the tuberculin syringe containing the vitamin "A" dispersion, leaving the needle in situ. In many instances the pain is so exquisite in and around the fibrous lesion that a posterior tibial nerve block or large toe block is used.

The initial dosage should not exceed 0.1 ml. per square centimeter. Care should be taken to avoid intravenous injection. Usually from 3 to 5 injections are necessary. Involution begins within a few days and after several weeks the lesions regress completely. Mechanical and shoe therapy is used where and as indicated.

Case Reports

1. Mrs. M.L., housewife, age 31, was first seen on December 22, 1955, with a neuro-fibrous lesion, 2 cm. in size, under the 4th metatarsal head right foot. This condition had been present for 12 years and required monthly treatments for temporary relief. The patient was 7 months pregnant and routine foot care no longer afforded her even temporary relief.

Three weekly .2 cc. injections of Steinberg's Vitamin "A" solution brought about the complete regression of the marble-like ball and superficial callus.

It was most gratifying to see the gradual rgression of this troublesome lesion and the change to normal skin tissue.

2. Miss H.H., R.N., 65 years old, was first seen on October 31, 1951, with a neuro-fibrous heloma 2.5 cm. in size, under 3rd metatarsal head right foot. Monthly palliative treatments afforded her only partial relief.

This patient had been plagued with this lesion for over 30 years. Every mode of treatment had been used but to no avail. It was not until September 1955 when we started injecting the Steinberg Vitamin "A" solution that complete relief was obtained. We gave her 4 injections of .3 cc. Vitamin "A" every 2 weeks. Her schedule didn't permit her to get in weekly. When I saw the patient on June 9, 1956, some fibrous tissue and superficial callus was present. The patient had become careless about her footgear and re-traumatized the old fibrous area. .2 cc. Vitamin "A" brought about a complete regression.

3. Mrs. S.G., age 62, housewife, was first seen on January 8, 1956, with two neuro-fibrous lesions, one under 3rd and 4th metatarsal heads left foot, 3 cm. in size, the other under inter-phalangeal joint 1st toe right foot, 2 cm. in size. These lesions had plagued this patient for 28 years. She had run the gamut of shoes, supports, potential cautery, dessication, etc. She came to the office with her mind set on just one thing—radical surgery. She was sick of being sick because of her

lesions and was willing to submit only to a surgical procedure, which in her mind was the only solution to her problem. I showed her Dr. Steinberg's article which appeared in the April 1956 issue of the *Journal of Surgery*, explaining the rationale and treatment of resistant verrucae with the Vitamin "A" solution. She decided to "try" the treatment. Her lesions were so painful, I had to use a posterior tibial nerve block on the left foot and a block at the base of the right large toe. After the first injection her discomfort was markedly improved. Gradual regression followed weekly injections of .4 cc. Vitamin "A" for lesion under 3rd and 4th metatarsal heads left foot, and .2 cc. under inter-phalangeal joint of the right large toe. The left foot lesion required 5 injections, the right large toe lesion 6 injections for complete regression.

4. Dr. B.S., veterinarian, 38 years old, was first seen November 3, 1955, with neuro-fibrosum, 3 cm. in size. This had been present for 7 years. The lesion had been previously treated with escharotics, dessication and anti-pressure pads. The lesion continued to get progressively worse. Two weekly treatments of .4 cc. Vitamin "A" followed by two bi-monthly injections brought about a complete regression of his lesion.

5. Mrs. P.K., bank teller, age 32, was first seen on May 9, 1955, with a neuro-fibrous lesion, 2 cm. in size, on the plantar surface of the 1st metatarsal right foot. The patient had suffered with this lesion for 14 years. She had developed a marked lateral roll with subsequent postural changes. Five bi-monthly injections of .1 cc. Vitamin "A" brought about a complete regression of the hard marble-like fibrous mass. A painless superficial callus remains and the patient is walking straight once again.

Summary

Resistant verrucae and heloma neuro-fibrosum have been a universal problem. Thanks to Dr. Marvin Steinberg's Vitamin "A" solution, podiatry has now taken the lead in the treatment of resistant cases of mosaic, plantar and subungual verrucae as well as neurofibrous lesions. It acts biologically by promoting normal epitheliazation without disabling the patient and leaves no troublesome scars. I consider the Vitamin "A" solution even more important in the treatment of neuro-fibrous lesions than verrucae because they are much more common, usually more disabling and more resistant to previous methods of therapy.

Security Mutual Bldg.

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CASE REPORT—BILATERAL PRONATION IN A CHILD

HOWARD JOHNSON, D.S.C.
JEANE L. JOHNSON, P.S.C.
Enid, Okla.

PRONATION is the most common postural deformity seen by the modern chiropodist. As the science of podopediatrics goes forward more investigations into the pathologic significance of pronation must be considered.

The diagnostician or consultant who feels that mechanical considerations are of no importance can be as wrong in some cases as the one that disregards completely all systematic or local disease factors of non-mechanical origin. The clarification of the pronation problem rests in the evaluation of all possible contributing factors, which should not be neglected by the chiropody profession.

The term "pronation" is applied to a foot that looks like a normal

healthy foot when not bearing body weight, but which, when weight is placed upon it, assumes an attitude of deformity wherein the arched structure of the foot, and principally its inner side, flattens. An angulation between fore and rear foot occurs, and the inner ankle usually assumes great prominence. When relieved of weight the foot again assumes its normal attitude.

Frequently the chiropodist is confronted with the patient who has been advised by his family physician to leave pronation alone, and has been assured the child will "outgrow" the deformity. Such advice is not based on knowledge of available facts, and the doctor who gives out such unscientific advice is responsible for some children growing up with a physical disability.

Pronation sets the stage for disability. Early detection and proper professional supervision lessen the chances of postural and gait changes, arthritic weakfoot, bunion deformity and painful foot imbalance. Many cases are presented to the modern chiropodist ,similar to the following case report:

History — G.S.C., male, age 5, weight 43, complains of foot and leg ache after use. Is clumsy and stumbles easily. Also fatigues easily. Instrument delivery. Pulled up at age 8 months. First steps at 10 months. First words at 2 years. Put words together at 3 years. Past diseases or ailments: measles and frequent colds. No allergies. Diet has been balanced, supplemented with vitamins C and D. His appetite is fair and has had combination immunizations.

From the mother's description, we assume a bilateral congenital metatarsus varus existed at birth. The family physician advised to leave the deformity to nature, that he would "outgrow" it. At age two, an orthopedic surgeon was consulted upon the advice of another physician.

The orthopedist padded and wedged his shoes for a period of about one year. The shoe corrections were so severe the child would cry and remove his shoes frequently. No other form of therapy was used until three months ago. The mother was advised by still another physician to consult another out-of-town orthopedic surgeon, who placed a rubber pad in his shoes and advised the mother the child would need an operation at around age nine.

Foot and Leg Examination

General appearance and mentality: The child is alert, average intelligence, sits properly and has a normal-looking pair of eyes. Simple portions of the Stanford or Terman-Merrill tests were negative. We have the impression the patient is probably a healthy child. Feet, ankle, knee, and hip joint motions are free and complete. Patella, Achilles, Babinski, and clonus reflexes were negative.

Under body weight his feet revealed a bilateral pronation with marked rearfoot and forefoot imbalance, distention of the dorsal veins, abduction, a positive Helbing's sign, and internal femur and tibia rotation. The abdomen is thrust forward, the chest sinks in and round shoulders were observed when standing. The gait was slouching with a slight toe in. Leg measurements were not remarkable. Footgear fitted long and narrow, straight last. Skin and nails negative.

Roentgenological Appraisal

Lateral and dorsoplantar views of the right and left foot in weight-bearing position revealed normal ossification time. The pathomechanical faults were correlated

with the clinical findings and evidence was recorded upon the radiograph as follows: Lowering of the pitch of the os calcis, talus is forced forward and pivots downward and is rotated medially. (The talus bone is minus muscular attachments, consequently, its position is influenced by other bones.) The navicular is forced forward and the cuboid is moved in a downward position. A line bisecting the first metatarsal shaft on the dorsoplantar view revealed a 35 degree angle with a line bisecting the talus. Normal range for this angle is 6 to 15 degrees.

Impression

The doctor who delivered the child failed to recognize and refer the problem to a competent authority, constituting a gross neglect of duty. Apparently the first orthopedist, in his attempt to radically correct the forefoot deformity, failed to neutralize the pronation which does exist in the great majority of children with metatarsus varus.

We have observed that many of the facts are not considered by many medical men, in the treatment of metatarsus varus. The condition has not been properly evaluated by the average orthopedist. For this reason, we see many cases of adduction deformity of the forefoot that have been subjected to radical procedures which should actually be used in a small minority of cases.

It is further evident that the second orthopedic surgeon the patient consulted was so engrossed in a possible surgical case, he gave the parents a glorious brush-off, by stating nothing much could be done except to wait and see if an operation would be necessary in the future.

Recommendations

Here we have a simple pronation with no apparent complications. Therefore, the parents can be assured considerable improvement, if they have the patience to follow through over a period of a minimum of 5 years with a foot and postural rehabilitation regime. This regime would include:

1. Attempts to neutralize the pronation position of the feet, with posture plates, balanced moulds, shoe modications, or other appropriate means at our disposal.
2. Corrective active and passive foot and leg exercises, including certain types of dancing taught by competent instructors.
3. The encouragement of proper walking, standing, and sleeping habits.
4. Supervision of shoes as to type and size compatible with the foot and condition.

Bass Bldg.

Disposition of Amendment on "Change of Designation"

In the October 1956 issue, Vol. 46, No. 10, disposition of this amendment to the Constitution was ininadvertently omitted. This was referred back by the House of Delegates to the Executive Council for further study.

LOCKE

(Continued from Page 763)

appraisal of present concepts of therapy has been suggested. The results obtained from the combined use of local injection of the anti-inflammatory corticoids and the various mechanical orthopedic and chiropodical supportive measures, have been encouraging. It is believed that these results are better than one could expect from either therapeutic measure alone. In this series, longer periods of remission have been obtained and a fewer number of interim injections have been found necessary than have previously been reported. The emphasis on mechanical and physiotherapy may in part account for these differences.

Summary

1. A re-evaluation of the concepts of some common disorders of the foot is presented in which the major role of the arthridities and allied disorders is emphasized.

2. A review of early injection therapy employed in these conditions is discussed.

3. The use of the newest antiphlogistic corticosteroids in the treatment of various disorders of the foot is presented.

4. The results of these therapies are demonstrated.

5. A new approach to the treatment of the simple corn and the neuro-fibrous heloma is suggested, investigated and a preliminary report presented.

134 Engle Street

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CAUSES AND THERAPY OF NAIL DISEASES

Both systemic disease and local infection can be implicated in disorders of the nail*.

CAUSES of nail changes are congenital abnormalities, trauma, local infection, skin disease, and toxic and nutritional dystrophy. When no other congenital ectodermal defect is apparent, syphilis, phpopara-thryoidism, and fungous disease must be excluded. Koilonychia is also a sign of microcytic anemia.

An injury to the nail causes it to grow with a permanent longitudinal furrow. A period of ill health arrests normal cell production which results in transverse furrows.

Acute infection of the nail fold by staphylocci or streptocci usually starts from the base of a hangnail. Treatment consists of evacuating the pus with a needle and applying an antiseptic dressing.

Fungi ordinarily infect only one or two digits while congenital, toxic, and other dystrophies are usually symmetrical. Diagnosis is established by microscopic examination of nail shavings immersed in 30% potassium hydroxide.

*Diseases of the nails. Practitioner 176:497-501, 1956

Bernard C. Tate, M. D., Modern Medicine, August 1, 1956. p. 125

PHARMACEUTICAL PREPARATIONS FOR THE PROFESSION

HARRY L. HOFFMAN, Ph.G., D.S.C.
Chairman, Council on Chiropodical Therapeutics and Pharmacy

A column devoted to preparations, new and old, with emphasis on their value and uses in everyday chiropody practice. This will be a regular monthly column and we invite questions, which we shall endeavor to answer, or obtain the answer.

Flexin (McNeil)

Zoxazolamine, Lissive agent

Flexin is a new therapeutic agent with activity not evident in other drugs currently available (according to McNeil). The primary pharmacological effect of Flexin can be described as "lissive"—a term indicating relief of skeletal muscle spasm without interference with normal function.

Description: Flexin is 2-amino-5-chlorobenzoxazole.

Action: The major action of Flexin is depression of polysynaptic pathways with comparatively little effect on monosynaptic arcs, neuromyal junction, muscle or motor nerves. This action is apparently the result of a selective inhibition of transmission through subcortical, brain stem, and spinal polysynaptic pathways.

Indications: The unique properties of Flexin have proved useful in the following disorders where skeletal muscle spasm or spasticity is the common denominator: Musculoskeletal disorders: Sprains, muscle strains, and contusions. Spondylitis. Low back disorders (lumbago, backache, ruptured intervertebral discs), rheumatoid arthritis, osteoarthritis. Fibrositis (myositis, bursitis, "muscular rheumatism"), cervical root syndrome. Neurological Diseases: Cerebral palsy, multiple sclerosis, cerebrovascular accidents, spinal spasticity states, Parkinson's disease.

Advantages: 1. Useful in all disorders where skeletal muscle spasm is a prominent symptom. 2. More effective than any other orally administered skeletal muscle relaxant. 3. Can be prescribed for both adults and children. 4. Well tolerated and few toxic effects. 5. Has a useful duration of action of about 6 hours. 6. May be used in conjunction with accepted measures such as physical therapy, exercise, analgesics, and diet.

Suggested Dosage: Adults: One to two tablets (250 to 500 mg.) three or four times a day, during meals or with food. Children: One tablet (250 mg.) two to four times a day.

Note: For administration to infants and young children, Flexin tablets should be crushed and mixed with food or a suitable vehicle such as apple butter, molasses, or honey. Flexin *tablets should not be chewed* and swallowed as *this will produce a burning sensation in the mouth and throat.*

Side effects: Flexin may produce gastrointestinal symptoms (nausea, vomiting or anorexia) or symptoms of lightheadedness or dizziness in some patients. Drowsiness may develop occasionally. These side effects can often be avoided or minimized by administering Flexin only with meals or food, or by dosage adjustment. Flexin should be discontinued if undesirable side effects cannot be reduced to a tolerable level by dosage adjustment. As with any drug, Flexin should be discontinued if a skin rash suggestive of drug sensitivity develops.

How Supplied: Tablets each 250 mg. in bottles of 50 each. (Tablets are scored, colored yellow, imprinted "McNeil").

Typical prescription:

Rx Flexin Tablets aa 250 mg.
Dispense #50

Sig: One (1) tablet four times a day during meals.

Spectrocin Ointment (Squibb)

This is an ointment composed of Neomycin and Gramicidin in plastibase. Each gram contains 2.5 mg. of neomycin and 0.25 mg. of gramicidin in plastibase.

Indications: Superficial bacterial infections of the skin not involving extensive areas: Impetigo contagiosa, impetiginized dermatitis (eczematous, atopic, contact, etc.), Ecthyma, Paronychia (acute), Furunculosis, Sycosis vulgaris, Pustular folliculitis. Cutaneous ulcers (including stasis ulcers and neurogenic ulcers), secondarily infected minor burns, neurotic excoriations and pemphigus. Prophylaxis of infections following minor surgery. Prophylaxis and treatment of infected scratches and abrasions. Bedsores, superficial infections of skin in diabetics.

Application: Apply several times a day; rub in well. If crusts are present, better results are obtained if they are removed with wet dressings or soap and water before applying ointment. *Caution:* In rare instances following prolonged administration to the skin, localized moniliasis has been observed but cleared when Spectrocin ointment was discontinued. Spectrocin ointment is not intended for the treatment of deep abscesses or inflammation of lymphatic vessels; in such conditions, parenteral antibiotic therapy is indicated.

Supply: In 15 gram and 30 gram collapsible tubes. By Squibb.

Rx Spectrocin Ointment 30.0
Squibb
Disp #1 tube

Sig: Apply twice daily as directed.

1098 National Press Bldg.

ARLIDIN: A CLINICAL EVALUATION OF A PERIPHERAL VASODILATOR WITH SELECTIVE ACTION ON MUSCLE VESSELS

ARLIDIN is an effective dilator of blood vessels in skeletal muscle and should be used in the management of intermittent claudication. Two hundred and twenty patients with intermittent claudication as the chief manifestation of a deficient blood supply to the working muscles of a limb were treated with this new vasodilator drug. Their vascular insufficiency resulted from organic arterial disease. The commonly used vasodilator drugs were of little value in improving walking tolerance. However, when these patients were given Arlidin orally two thirds of them showed a decided increase in their ability to walk. Intra-arterial injection of a single 6 mg. dose resulted in an average increase of blood-flow in the calf of 300 to 400%. *Stein, I. D., Annals of Internal Medicine, Vol. 45, No. 2, Aug. 1956.*

THE PODOPEDIATRIC CLINIC

JOHN T. SHARP, D.S.C.
Chairman, Committee on Children's Foot Health

This section is devoted to a discussion of the problems peculiar to the child's foot. A separate subject will be considered each month, on a question and answer basis. Members are invited to send in their questions relative to the various phases of podopediatrics. Questions will be answered in accordance with the heading under which they fall.

"Pigeon Toe"

What is the cause of "pigeon toe" in children?

The so-called "pigeon toe" or adduction gait in children has a varied etiology. One of the more common causes is internal torsion, either of the femur or tibia, or sometimes of both. The disorder known as metatarsus varus or metatarsus adductus is another fairly common cause of this type gait. Painful excrescences on the foot may produce an evasion type of gait which is adductive in nature, and the same may be said of a painful pes valgoplanus. Neurological lesions such as Anterior Poliomyelitis, Spina Bifida, Charcot-Marie-Tooth Muscular Atrophy, and Friedreich's Hereditary Ataxia may display an adduction form of gait as part of their syndromes. Here the resultant adduction occurs either from paralysis of the everters and abductors of the foot or from spastic lesions involving the adductors or inverters. Occasionally, discrepancies in extremity length may give rise to adduction gait on the short side. Since full extension of the foot is usually accompanied by some adduction and inversion, pigeon toe is often exaggerated during running and rapid walking.

How may one recognize internal torsion?

If the torsion is in the leg, it may be recognized as follows: with the patient sitting on the edge of the examining table, legs and feet hanging free, the feet will be seen to be in a position of definite adduction. If one then marks the center of the tibial tubercle with a skin pencil, and then brings the foot into a neutral position, the marking on the tubercle will point in an outward or lateral direction. On the other hand, if the leg is so arranged that the tubercle marking points directly forward, the foot will be in adduction, and when viewed from the front, the external malleolus is more noticeable than the internal malleolus. If the internal torsion is in the hip and thigh: with the patient standing, feet pointing straight ahead, the patella will be found to be displaced medial to the mid-line of the extremity. Further, the patient will present a restriction of external rotation at the hip, and in some instances, the tensor fascia lata will be found to be short and contracted.

What is the treatment for internal torsion?

If the torsion is only in the leg, and the patient is under four years of age, the Denis Browne splint provides an excellent form of therapy. It is used primarily as a night splint, but if the child naps in the afternoon, it may be used during this period as well. The sitting position of the child must be supervised carefully by the parent, since

many of these patients sit either in "tailor" fashion, or with the legs actually held under them in internal rotation. These habitual postures help keep the deformity in existence, and must be controlled if adequate results are to be obtained. In addition to the splint, external rotation exercises are prescribed, and adequate shoe therapy is employed. Shoe therapy usually consists of external sole wedging, and it is frequently good policy to add an inner heel wedge as well to help in the prevention of strain of the medial longitudinal arch.

Where the torsional problem is in the hip and thigh, the involved muscles must be passively stretched either daily by the parent or several times weekly by the practitioner. The stretching must be of the passive type since active stretching by the patient will not be carried beyond the point where the process becomes uncomfortable. In some instances the Denis Browne splint is helpful, provided there is no compensatory external rotation present in the tibia. Here again it is necessary to supervise the sleeping and sitting habits of the child, positions which encourage internal rotation being strictly avoided.

Occasionally roller skating is helpful in cases of internal torsion.

What is the treatment for Metatarsus Adductus?

If the patient is seen prior to walking age, mild cases may be treated by passive stretching on the part of the parent. The stretching is performed several times at each diaper change. Exercise alone, if properly performed, will overcome most of the milder cases. However, it is most important that the parent do the exercises several times in the presence of the chiropodist, so that a thorough understanding of the exact movement to be employed is attained. The rear foot must be immobilized in a neutral position as the forefoot is forced into the greatest possible degree of abduction.

More severe cases of metatarsus adductus, in the prewalking child, are best treated by plaster casting.

Since most cases of this deformity are accompanied by varying degrees of internal tibial torsion, the Denis Browne splint is a helpful adjunct to therapy, provided of course the child is under four years of age. This device, in these instances, is used to best advantage if the shoes are reversed (left shoe on right foot). An original inflare shoe is the best to use for this reversal procedure, since in the reversed position the shoe becomes an outflare. If desired, a special outflare shoe, such as the tarso-pronator may be employed.

What is the prognosis in cases of pigeon toe?

In cases resulting from torsional disorders, mild and fairly severe metatarsus adductus, and most of the "evasion" forms, the prognosis is very good. In metatarsus adductus cases seen in the older child, and in the various neurological types, the prognosis is of course much worse. There are certain forms of pigeon toe which are apparently inherited gait patterns, so firmly ingrained in the individual's neuro-muscular mechanism that no amount of treatment will bring about full correction. For this reason, it is always good practice to question the parent very carefully as to whether or not the type of gait which the child displays is peculiar to any other members of the family.

What is a "twister," and how valuable is it in the treatment of pigeon toe?

This is a device which is sometimes used in the management of pigeon toe cases secondary to internal torsional problems. It consists of a belt (which encircles the child's waist) to which are attached two elastic bands. In application, the bands encircle or "twist" down the extremity and attach, usually by a buckle, to the outer border of the shoe. I personally do not care for this device because it is unsightly and sometimes produces self-consciousness in the child. It may be hidden by overalls or slacks in the winter, but this procedure is not feasible in the warmer weather. I do not feel that it is particularly effective.

VOCATIONAL GUIDANCE PROGRESS REPORT

THE VOCATIONAL GUIDANCE program bringing the story of our profession before vocational guidance counsellors and students on the high school level is gaining momentum.

The following list shows the partial response to our mailing of the brochure, "Chiropody As A Career," to guidance counsellors throughout the country, plus the list of our film "Chiropody As A Career," in the catalogue of Association Films Inc., who are distributing the film for our Association.

The film, "Chiropody As A Career," has been or will be shown as follows:

Bensalem Township High School, 2201 Street Rd., Cornwell Hgts., Pa., June 12-13, 1956.

Station KCSJ-TV, 2226 TV Lane, Pueblo, Colo., June 13-17, 1956.

Station WDSM-TV, 230 E. Superior St., Duluth, Minn., June 25-July 1, 1956.

Station KXLF-TV, Butte, Mont., July 9-12, 1956.

Highland Park Junior College, Highland Park, Mich., July 13, 1956.

Station WLBC-TV, Box 271, Muncie, Ind., August 1, 1956.

Station KLEW-TV, 1115 Idaho St., P.O. Box 358, Lewiston, Idaho, August 1-6, 1956.

Station WREX-TV, Rockford, Ill., September 1-7, 1956.

Station KGVO-TV, 126 E. Main, Missoula, Mont., September 10-12, 1956.

Station KXLF-TV, Butte, Mont., September 23-28, 1956.

Howard High School, 13th & Poplar Sts., Wilmington, Del., September 25, 1956.

East Islip Union School, East Islip, N. Y., October 10, 1956.

Ockawamick Central School, Philmont, N. Y., October 22, 1956.

Carlin High School, Carlin, Nevada, October 23, 1956.

Luana Cons. High School, Luana, Iowa, November 2, 1956.

PTA, Washington School, North Bellmore, N. Y., November 14, 1956.

PTA, Washington Street School, Merrick, N. Y., November 14, 1956.

Lee High School, Grand Rapids, Mich., November 14, 1956.

Valhalla Board of Education, Valhalla, N. Y., November 27, 1956.

Brookeland School, Brookeland, Texas, December 3, 1956.

Hortonville High School, Hortonville, Wis., December 4, 1956.

Brookside School, Great Barrington, Mass., January 11, 1957.

Francesville High School, Francesville, Ind., January 16, 1957.

Camden High School, Camden, So. Car., January 25, 1957.

Junior High School, Clovis, N. Mex., February 13, 1957.

Delmar High School, Delmar, Del., March 4, 1957.

Unity High School, Mendon, Ill., April 1, 1957.

We are suggesting that the individual state societies follow up these contacts and offer a speaker to the school plus the pamphlets that the National Association of Chiropodists has prepared, namely, "Stepping Up To A Career."

Vocational Guidance Committee

DR. L. B. THOMPSON

DR. MILTON WOLFSON

DR. HARRY HOROWITZ

COMMUNICATION FROM THE PROFESSION

BECAUSE of the awareness of the public as to the chiropodist's role in the public health picture, we are now at the point in the profession to consider increased number of factors governing our mode of treatment.

When our profession was embryonic in stature we were in the palliative phase (once a year or more treatment with one whisk of the scalpel). The second phase consisted of partial diagnosis and treatment (including fancy shoes and gadgets, plus arch supports of varying degrees). And the modern phase, which should include all phases of diagnosis and treatment at our command.

We must seek causes and effects. We must lay the foundation of the Scientific Method, the modern approach to chiropodical therapeutics, not discounting the present "Art" of chiropody. Most of all, textbooks regard the foot as, *per se*, static anatomical normals or abnormals cut in a certain pattern. We must change that view. We must consider our patients as functional units both at a local and general level.

We must change the impression that shoes or any one agent or factor causes foot conditions. Let us look at one factor, for instance —shoes. If we take a quantity of X-ray photographs out of our files, some should include routine pictures without definite pathology. Now look at a few with specific pathology — hyperkeratoses (corns and calluses), and observe bone contours and articulations. You will notice no appreciable variation in anatomy between the so-called normals and abnormals. Therefore, we must assume that there is an X factor involving pathology, and that variation in structure does not necessarily preclude pathology unless pain is elicited or abnormal function is involved (Turchin).

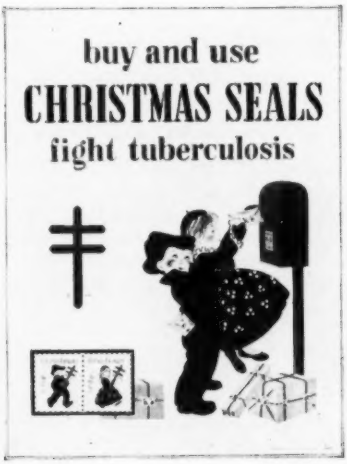
In conclusion, we must consider not only one facet or factor concerning pathology of the lower extremities, but the many variable factors which influence the human organism.

G. A. TOSI, D.S.C.
88a Middle Street
Manchester, N. H.

"The shoes and stockings will be QUITE enough Miss Evans!"

THE 50TH CHRISTMAS SEAL SALE

In 1956 the tuberculosis associations are carrying on the 50th Christmas Seal Sale in the United States. The first sale of Christmas Seals was conducted in December, 1907, by Miss Emily Bissell to raise funds for a small tuberculosis hospital in Wilmington, Del. Since that year, the Christmas Seal Sale has spread to every state and territory of the United States.



THE BEST
and
THE BIGGEST
1957 Annual Meeting

NATIONAL
ASSOCIATION OF CHIROPODISTS

DRAKE HOTEL
CHICAGO, ILLINOIS

SCIENTIFIC SESSIONS AUGUST 18, 19, 20

"HALL OF SCIENCE" "SCIENCE THEATER"
THE MOSTEST IN TECHNICAL EXHIBITS

STOP!! DON'T GAMBLE
IMPROPER FORCE STRETCHING
AND SEAM WEAKENING.

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NEW BUFFALO, MICH.

ORGANIZATION NEWS

Secretaries of local, state, regional, affiliated, subsidiary and other related organizations are invited to submit copy for this column.

DELAWARE

THE Chiropody Society of Delaware held its annual election of officers October 12, 1956, and the following members were elected for the fiscal year 1956-57: President, Dr. Martin Hirsh; Vice President, Dr. Leo Brown; Secretary, Dr. Harold W. Orr; Treasurer, Dr. James White.

ILLINOIS

Zone III

THE quarterly meeting of Zone III, Illinois Chiropody Society, was held in Galesburg, September 29th and 30th. Speakers were Dr. John

B

For that next case of

TYLOMA OF THE GREAT TOE

Chronic or acute Heloma, callous or vascular in nature, found on the inner side of great toe.

A prosthesis from cast of condition gives lasting comfort and in a greater percentage of cases a cure of that condition.

Send casts
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Liquid Rubber Appliance Lab.
489 High Street Newark 2, N. J.

Graham, Springfield, who spoke on "Internal Medications"; Dr. Curry Meyer, Galesburg, "Acrylic Nail"; Dr. Wm. Anderson, Danville, "Ultrasonic Therapy"; Drs. C. Arnett and S. Ruch, Peoria and Pekin, "New Materials in Appliance Making"; Dr. S. R. Gottler, Monmouth, "The Use of Flexible Plastic Material in Shielding."

The meeting was well attended from all areas of Zone III. Guests attended from Iowa and Wisconsin.

INDIANA

THE fall meeting of the Indiana State Podiatrists Association was held on October 6-7, 1956, in Indianapolis. The following officers were installed: President, Dr. C. W. Grinstead; President-elect, Dr. R. R. Kannally; First Vice President, Dr. D. A. Dickinson; Second Vice President, Dr. M. L. Blood; Secretary-Treasurer, Dr. A. J. Deeley; Board of Directors, Drs. W. D. Canada, P. Killen, C. W. Hoard; N.A.C. Delegate, Dr. A. J. Deeley; N.A.C. Alternate, Dr. R. E. Tanner.

NEW JERSEY

THE annual Scientific Symposium of the New Jersey Chiropodists was held at the Rutgers University Commons Building, New Brunswick, on Wednesday, October 31, 1956.

The program featured the following speakers: Dr. Marvin Steinberg, New York, N. Y., who spoke on "Medications, Their Use and Abuse"; Dr. Louis Newman, Philadelphia, Pa., lectured on "Surgical Approach to Plantar Metatarsal Lesions"; and Dr. Seymour Blau, Jersey City, N. J., lectured on "Skin Planing in Chiropody."

Region Three

Region Three of the National Association of Chiropodists, composed of the affiliated state societies

THE WM. J. STICKEL ANNUAL AWARDS For RESEARCH IN CHIROPODY for 1957

SPONSORED BY THE

Journal of the National Association of Chiropodists and The N.A.C. Agency, Inc.

Thirteenth Year of Awards

First Award—$400.00 **Second Award—$250.00** **Third Award—$100.00**

Fourth Award—$50.00 **Fifth Award—$50.00**

Members who desire to submit papers should make application on a form which can be obtained from the Secretary.

Research papers on any subject in the field of Chiropody may be offered. The final date on which papers will be accepted is April 15, 1957.

See Rules and Pertinent Information, J.N.A.C. Volume 46, Number 11, page 767, November, 1956.

of Delaware, Maryland, New Jersey and Pennsylvania, has officially announced that the 1957 Region Three, N.A.C. Chiropody Science Conclave will be held Thursday through Sunday, April 25-28, 1957, at The Ambassador Hotel, Atlantic City, N. J.

OHIO

THE Ohio Chiropodists Association is sponsoring a two-day Post Graduate Course, December 8-9, 1956, in Cleveland, Ohio. The course lectures will be given at the Ohio College of Chiropody, Cornell Road, in Cleveland. Lectures begin promptly at 9:30 A.M. and will adjourn Sunday, December 9th, at 4:30 P.M.

Chiropodists from any state or from Canada, who are members in good standing of their State and National Associations, are cordially invited to attend. Registration fee is only $20.00 which includes the cost of the banquet Saturday night.

Lecturers and their topics are: Dr. William Ignatoff, Newark, N. J., "Disease of the Skin"; Dr. H. T. Kearney, Chicago, Ill., "Geriatrics and Vitamin Therapy"; Dr. George Schecter, Los Angeles, Calif., "Diagnosis"; Dr. Marvin Shapiro, Toledo, Ohio, "The Art of Practice."

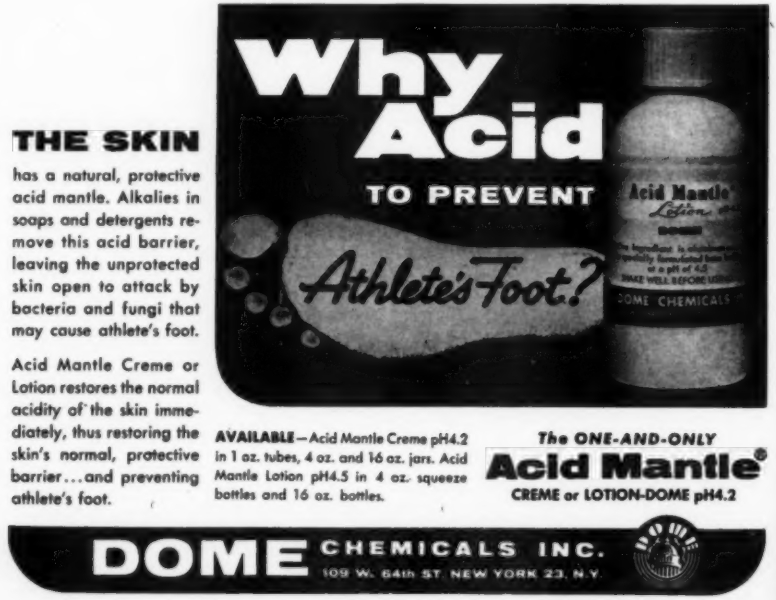
Certificates of fulfillment will be awarded to each man who completes the two-day course.

Headquarters will be at the Tudor Arms Hotel, Carnegie at East 107th, Cleveland. Chiropodists are invited to write to the Ohio Chiropodists Association, 30 East Broad Street, Columbus, Ohio, if they desire to attend.

PENNSYLVANIA

Western Division

THE Western Division, Chiropody Society of Pennsylvania, held a meeting on Thursday, Ocober 11,



THE SKIN

has a natural, protective acid mantle. Alkalies in soaps and detergents remove this acid barrier, leaving the unprotected skin open to attack by bacteria and fungi that may cause athlete's foot.

Acid Mantle Creme or Lotion restores the normal acidity of the skin immediately, thus restoring the skin's normal, protective barrier...and preventing athlete's foot.

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1956, at the Mellon Institute in Pittsburgh, Pa.

Howard Waite, Athletic Trainer at the University of Pittsburgh, was the speaker for the evening. He discussed many of the types of foot, ankle and knee injuries suffered by athletes and demonstrated his technique for strapping these injuries.

SOUTH DAKOTA

THE South Dakota Association of Chiropodists held their annual business meeting and election of officers on Saturday, September 22nd, in Sioux Falls. The following new officers were elected: President, Dr. M. D. Scofield; Vice President, Dr. E. A. Laga; Secretary-Treasurer, Dr. Robert E. Lee; Board of Directors, Drs. H. Valansky, M. Avery.

During the month of October, the film "Shake Hands With Your Feet" was shown on television and Dr. McCain and Dr. Anderson were in Sioux Falls for the Vocational Guidance Program. They spoke to student bodies of Augustana and Sioux Falls colleges and to the Washington and Cathedral High School classes.

TEXAS

IN September, the first issue of "The Lone Star Chiropodist" made its bow. It contains news of local interest to chiropodists in Texas, New Mexico, Oklahoma, Arkansas and Louisiana and all chiropodists. Judging by the first issue, the forthcoming issues will be awaited eagerly by the members in the above states.

Dr. Marshall Harvey is the editor and his editorial board consists of: Drs. W. Lee Austin, Riley C. Armstrong, Gerald R. Van Aken, Edward G. Fisch, Wm. H. Bowdler, Louis T. Bogy, Joseph C. Littrell, Carlos Hickerson, Jr., and Mrs. Joseph R. Ordile (Ladies' Auxiliary).

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Lockwood, James H., Cmdr., MC, USN U.S. Naval Hospital, San Diego, Cal. Bulletin of the Association of Military Dermatologists, June 1955, p. 2

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A.O.P.

"Football season is the only time of year when girls whistle at men in sweaters."

———

"Married life ain't so bad after you get so you can eat the things your wife likes."

———

"There's one thing about baldness; it's neat."

———

Young 6-year-old grandson, said Dr. George Arnold's patient, stepped on the foot of 2-year-old brother. Said the 6-year-old, "I'm sick and tired of everybody stepping on my corns and onions."

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The guy who works like a horse doesn't always draw the girl with the beautiful carriage.

"My wife had a dream last night and thought she was married to a millionaire."

"You're lucky! My wife thinks that in the daytime."

"I'm afraid you want the chiropodist next door."

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STATEMENT OF OWNERSHIP

STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 (TITLE 39, UNITED STATES CODE, SECTION 233) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF

The Journal of the National Association of Chiropodists, published monthly at Boston, Mass., for Oct. 1, 1956.

1. The names and addresses of the publisher, editor, managing editor, and business manager are: **Publisher, National Association of Chiropodists,** 3301 16th St., N. W., Washington 10, D. C., Editor, A. Rubin, D.S.C., 3301 16th St., N. W., Washington 10, D. C.; Business Manager, Mr. Franklin R. Fielding. 3301 16th St., N.W., Washington 10, D. C.

2. The owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual member, must be given.) Dr. Felton O. Gamble, President, 1888 N. Country Club Road, Tucson, Ariz.; Dr. Jonas C. Morris, President-elect, 108 W. Merchant St., Audubon, N. J.; Dr. A. Rubin, Secretary, 3301 16th St., N.W., Washington, D. C.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

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5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.)

Signed FRANKLIN R. FIELDING, Business Manager

Sworn to and subscribed before me this 1st day of October, 1956. Ann McCann. My commission expires July 14, 1958.

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"The only difference between a saint and a sinner is that every saint has a past and every sinner has a future."—*Oscar Wilde*

An old man was listening to some young folks smugly bragging about their country's achievements.

"It's all very well to boast of your history," he said, "but why don't you make some more?"

"When a beautiful woman smiles, somebody's purse weeps."—*Italian proverb*

"Fifty-nine muscles make a frown
Only fifteen turn it upside down
No—sixteen, for a smile won't start
Without the muscle we call a heart."

"If everyone sweeps before his own front door then the street is clean."—*Goethe*

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New York, N. Y.

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Cleveland, Ohio

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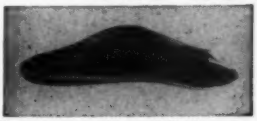
1810 Spring Garden Street
Philadelphia, Pa.

"Cap'n, I'm afraid it's termites!"

THE HOUSE OF COMFORT



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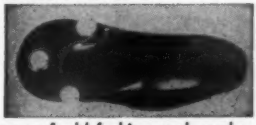

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August 14-21, 1957
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PHI ALPHA PI NATIONAL CONVENTION
Cleveland, Ohio
February 1-3, 1957
Hotel Statler

THE AMERICAN ACADAMY OF CHIROPODISTS Scientific Convention
Cleveland, Ohio
February 10-11, 1957
Hotel Statler

NEW YORK STATE PODIATRY SOCIETY FOOT CARE CONFERENCE
New York, N. Y.
February 22-24, 1957
Barbizon Plaza Hotel

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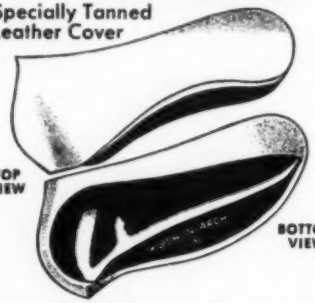

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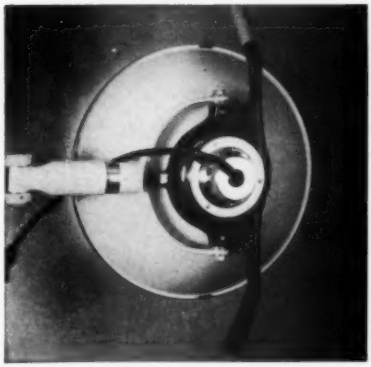

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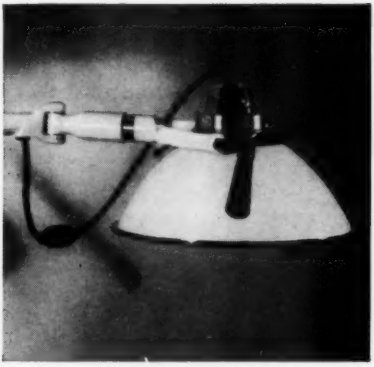

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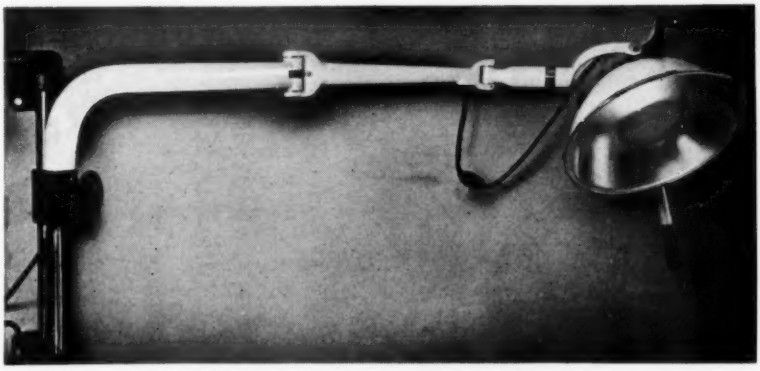

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